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No. 76
DIVISION OF STATISTICS

THE RAILROAD COMMISSION OF WASHINGTON,

ex rel. W. H. Paulhamus,

vs.

THE PUGET SOUND ELECTRIC RAILWAY.

**OPINION, ORDER AND
FINDINGS OF FACT**

FEBRUARY 26, 1910

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BEFORE THE RAILROAD COMMISSION OF
WASHINGTON.

[No. 76.]

THE RAILROAD COMMISSION OF WASHINGTON, *ex rel.* W. H.
PAULHAMUS, *Complainant*, vs. THE PUGET SOUND
ELECTRIC RAILWAY, *Defendant*.

SYLLABUS.

COMMON CARRIERS—AMOUNT OF RETURN. Provided a public service corporation charges no more than each particular service is worth to its patrons, it is entitled to receive from rates and fares a fair return on the value of its property used in the public service.

CARRIERS—RETURN, HOW ESTIMATED. Generally a reasonable return for a public service corporation is such as is expected and generally realized in the locality upon investments for a somewhat similar nature with regard to the risk attending them.

CARRIERS—INTERURBAN ROAD—RETURN, ENTITLED TO. Where an interurban railroad connects two large, growing cities but 34 miles distant, traversing rich and fertile valleys with numerous towns, the future population of which valleys it is conceded will be dense, where the surroundings are ideal for an interurban road and where little or no risk is involved in the enterprise, a lower rate of return would be expected than if the undertaking was hazardous or involved risk. Held, under the facts in this case a 7 per cent. return on the then value of the property is sufficiently remunerative.

DISCOUNTS — EXPENSES OF FINANCING—BONDS—WELL-SECURED BONDS. The expense necessary to be paid a reputable broker for making a full and complete investigation into the cost and prospects of an inviting public service enterprise and a reasonable compensation for inducing his clientage to invest in well-secured bonds and securities of such corporation is a legitimate and proper item of expense. Well-secured bonds are such as have behind them the guarantee of a solvent independent road or where a substantial amount of the investment is procured independent of the mortgage bonds. Where all the investment, including costs of organization and preliminary surveys, are derived from the sale of bonds, the loan is not a financial business transaction, but is a financial speculation. Discount paid under such circumstances is not a proper item to be considered in valuing the property. Held, under

the facts in this case, that 5 per cent. of 75 per cent. of the cost of reproducing the road is a proper and ample sum to cover the costs of financing the enterprise.

CAPITAL TO REMAIN UNIMPAIRED—DEPRECIATION—OBsolescence. A public service corporation is clearly entitled from its operating revenues to not only earn a reasonable return on the value of its property so used, but to maintain unimpaired its capital. While during the first few years of the life of the railroad there is practically no call for renewals, the property is nevertheless daily growing older, and the traffic then being moved should bear its portion of the burden dependent upon depreciation and obsolescence and not throw this full burden upon the traffic moving when heavy renewals become necessary. In such cases there should be charged to operation a sum sufficient to care for such renewals and obsolescence as they become necessary and a fund should be maintained for such purpose. Traffic of today should pay enough to secure a fair return on the property and maintain unimpaired the capital, but cannot be called upon to bear burdens that should have been borne by traffic in the past.

PARTICULAR RATE—WHEN REASONABLE. In no event can a carrier charge more than the particular service is worth to the shipper. The value of the service is to be considered and not exceeded, subject to the qualification that the charge must at least equal the moving cost. Where mechanics, laborers and clerks have been induced by a long continuous rate to settle in suburban towns and where approximately all of the heads of families in such towns are such laborers and clerks dependent for their livelihood on employment in the cities, an advance in the rates to such an amount that such persons cannot live and pay the rates, but must abandon their homes for localities where cheaper transportation prevails, is unreasonable, irrespective of the return received by the company, excepting that the company cannot be called upon to render the service at a loss.

SCHEDULE OF RATES—WHEN REASONABLE. Many features must be considered in determining whether a rate is or is not reasonable. The whole schedule must be considered when judging its fairness to the company, and if from all its revenues it receives but a fair return and the patron is charged no more in each particular case than the service is worth, *per se* the rates cannot be said to be unreasonable.

COMPARISON OF RATES. A comparison of the rates charged generally for a specific service by other roads under normal conditions, together with a comparison of the relation of such rates both to the carrier and the shipper, furnishes a good test to judge of the reasonableness of such particular rate. Held, that as the rates generally charged by electric lines to points not suburban are at least two cents per mile and such rates are generally deemed reasonable, and the carrier in this case not receiving under the rates so advanced a sufficient return, no reason exists why the rate to points not suburban and between intermediate stations should be reduced below two cents per mile. As resi-

dents of Seattle and Tacoma have the advantage of water competition at exceedingly low rates, no peculiar circumstances exist calling for a reduction of the through rate.

DISCRIMINATION—SUBURBAN RATES—COMMUTATION RATES. The fact that an occasional traveler from points not suburban might be compelled to pay a greater rate per passenger mile than the constant traveler from suburban points does not subject him to unjust discrimination. He is entitled to be carried at a reasonable rate, but not necessarily as cheaply as the residents of the more favored districts. The public is interested in the building of suburban towns, thus aiding the territorial growth of cities, relieving their congested districts.

STATEMENT OF THE CASE.

The Puget Sound Electric Railway was constructed during the years 1901 and 1902 and commenced operations on the 24th day of September, 1902. The road traverses the valleys between Seattle and Tacoma, a distance of 32.01 miles, with a branch extending from Renton Junction to Renton, a distance of 2.96 miles; a branch from Willow Junction to Puyallup, a distance of 6.94 miles, with some other short branches to which a reference is unnecessary. At the time of commencing operations the towns in the valleys traversed by the road, as shown by the United States census of 1900, consisted of Georgetown, with a population of 243; Kent with a population of 755; Auburn, with a population of 489; and Puyallup, with a population of 1,884; Renton, with a population of 412, while Seattle had a population of 80,671, and Tacoma a population of 37,714; and at the present time Seattle has a population exceeding 275,000, Tacoma exceeding 100,000, Puyallup 7,000, Kent 3,500, Auburn 1,500, Renton 3,500, Georgetown 7,000, Meadows 500, Quarry, Duwamish and Allentown from 500 to 600, Riverton between 400 and 450, Foster 900, Tukwila between 500 and 600, Earlington 500, Algona 630, Pacific City 800, Milton 600, and numerous smaller villages along the line of road, and excluding Renton and Puyallup, which are situate upon the branch lines, the territory between Seattle and Tacoma contains a population tributary to this road of approximately 15,000.

The gross earnings of the road since it began operation have been as follows for the fiscal years ending June 30th:

1903.....	\$354,990 67
1904.....	430,732 84
1905.....	450,632 32
1906.....	574,962 06
1907.....	708,548 78
1908.....	721,542 85

—and for the year 1909, calculated upon the same basis with reference to terminal trackage rights, the gross earnings were \$755,552.17.

The earnings of the company are derived approximately 80 per cent. from passenger revenue and 20 per cent. from freight revenue.

On October 17th, 1909, the defendant company put in force a schedule of passenger rates increasing the rates between Seattle and Tacoma from 60 cents to 73 cents for single fare and from \$1.00 to \$1.25 for round trip. It also increased its rates from Seattle to the following points from 10 cents to the amount named, viz:

To Chicago Avenue.....	11 cents
To Davis	12 cents
Meadows	12 cents
Southside	13 cents
Floraville	14 cents
Cardmoores	14 cents
Duwamish	15 cents
Quarry	16 cents
Allentown	17 cents
Riverton	17 cents
Mortimer	18 cents
Foster	19 cents
Tukwila	20 cents

—and from Seattle, from 15 cents to the rates named at the following points: To Black River, 21 cents; to Renton Junction, 22 cents; to Renton, 27 cents; from Seattle, from 20 cents to 23 cents to Nelson and 25 cents to Orillia; from Seattle to O'Brien, from 25 cents to 30 cents; from Seattle to Kent, from 30 cents to 34 cents; from Seattle to Thomas, from 35 to 38 cents.

Under the tariff in force from practically the time of starting operation until October 17th, 1909, provision was made for a round-trip fare as follows: From Seattle to Chicago Avenue, Davis, Meadows, Southside, Floraville, Cardmoores, Duwamish, Quarry, Riverton, Mortimer, Foster and Tukwila, 15 cents; from Seattle to Black River, Renton Junction and Renton, 25 cents; from Seattle to Nelson and Orillia, 35 cents; to O'Brien, 45 cents; to Kent, 50 cents; Thomas, 60 cents; Meredith and Christopher, 70 cents; to Auburn, 75 cents; to Farrow, Stuck and Bluffs, 85 cents; to Edgewood, 95 cents, and to Milton, Fife, Brookville and Waverly, \$1.00. From Tacoma a round-trip was provided in the old tariff to Waverly, Brookville and Fife of 15 cents; to Edgewood, 25 cents; to Bluffs, 35 cents; to Stuck, Farrow and Auburn, 45 cents; to Christopher and Meredith, 50 cents; to Thomas and Kent, 60 cents, to O'Brien, 70 cents; to Orillia, 75 cents; to Nelson, Renton Junction and Black River, 85 cents; to Renton, Tukwila, Foster, Mortimer, Riverton, Quarry and Duwamish, 95 cents, and from Cardmoores north to Seattle a round-trip of \$1.00. Under the new tariff no reduction is made in regular fare if round-trip ticket is purchased save and except between Seattle and Tacoma.

Shortly after the raise in rates a formal complaint on the relation of W. H. Paulhamus was filed and a citation issued thereon against the defendant challenging the increased rates and alleging the increase in rates to be unreasonable and excessive. On the issuance of this citation the Commission also issued a complaint against the defendant, under section 12 of the Commission act, for the purpose of ascertaining and fixing the value of the property used by the defendant as a common carrier.

The cases were consolidated for the purpose of taking evidence and findings of fact under the valuation case were made and such findings were introduced in evidence in this case. Findings have also been made in this case and are now on file. These findings are too voluminous to set out in this memorandum opinion, but the important ones will be referred to.

The Commission found the market value of the property used

by the defendant company in the conduct of its business as a common carrier to be \$4,070,237; that the net earnings of the road from operation, figured on the money invested since its construction, amounted to approximately the following per cent.:

For the fiscal year ending June 30, 1903.....	5.15 per cent.
For the fiscal year ending June 30, 1904.....	5.25 per cent.
For the fiscal year ending June 30, 1905.....	5.18 per cent.
For the fiscal year ending June 30, 1906.....	7.79 per cent.
For the fiscal year ending June 30, 1907.....	9.92 per cent.
For the fiscal year ending June 30, 1908.....	7.60 per cent.
For the fiscal year ending June 30, 1909.....	5.74 per cent.

We found that during the seven years the property has been operated there has been a depreciation of the physical property to an amount of approximately \$500,000, and we further found that no replacement fund had been provided or charged to operating expense to take care of the replacement thus rendered necessary by the depreciation, with the exception of approximately \$51,000 expended during the three years last past in actual replacements, which have been charged to operating expenses.

The annual report of the defendant for the year 1909 shows:

Gross earnings from freight.....	\$131,779 85
Gross earnings from passengers.....	516,767 90
Total earnings	<u>\$648,547 75</u>

The commission further found that 25 per cent. of these gross earnings, or \$162,136.94, should be expended or set aside from operating expenses to cover maintenance and replacement.

There was spent for the year 1909 for maintenance and replacement \$102,125.21. By adding the difference between these two items, namely, \$60,011.73, to the other amount expended for operating expenses, the operating expenses would have been increased from \$393,995.88 to \$454,007.61. Of the total passenger receipts, approximately 53 per cent. thereof was received from the sale of tickets at stations, and approximately 47 per cent. was received by conductors for cash fare paid on trains. Fifty-six and eight-tenths per cent. of the total passenger operating revenue was received from through passenger service between Seattle and Tacoma. Other passenger receipts

cannot be divided between stations, as receipts paid to conductors are all turned in as local fares collected; that, as indicated by ticket sales, 9.86 per cent. of the total passenger operating revenue was received from through business between Kent and Tacoma and Kent and Seattle, 9.22 per cent. from through business between Auburn and Seattle and Auburn and Tacoma, and 6 per cent. from through business between Renton and Seattle and Seattle and Renton. The ticket sales made in the Seattle and Tacoma offices show ticket sales to the following points for the fiscal year ending July 1, 1909, as follows:

	<i>For Seattle Office.</i>	<i>For Tacoma Office.</i>
Georgetown	\$699 55	\$182 70
Meadows	2,946 75	17 00
Duwamish	2,204 45	.....
Riverton	6,301 00	.....
Foster	5,454 75	.....
Tukwila	4,012 50	4 95
Renton Junction	2,029 30	240 60
Renton	10,980 70	371 75
Orillia	2,678 40	176 60
O'Brien	2,356 50	74 85
Kent	11,648 75	893 00
Thomas	1,658 65	103 60
Christopher	895 80	34 30
Auburn	8,715 20	1,097 20
Algona	1,511 00	134 40
Pacific City	4,947 20	421 20
Edgewood	628 10	645 05
Milton	211 40	2,387 35
Seattle to Tacoma.....	94,607 80	.....
Tacoma to Seattle.....	.....	47,820 40

We also found that Southside, Floraville, Cardmoores, Duwamish, Quarry, Allentown, Riverton, Mortimer, Foster and Tukwila were strictly suburban towns tributary to Seattle; that approximately 90 per cent. of the heads of all families in these towns earn their livelihood as laborers, mechanics, and clerks in Seattle, the clerks traveling to and from Seattle six days in the week and the laborers making the trip from four to five times weekly. That Tidehaven, Brookville, Meeker, Berrytown, Cedarhurst, Firwood, Ardena, Fife, Milton, Edgewood, Jovita, Bluffs, Pacific City and Algona were strictly suburban

towns tributary to Tacoma, from fifty to sixty per cent. of the heads of all families living in these towns earning their livelihood as laborers, clerks and artisans in Tacoma. That a large portion of the residents of Pacific City earn their livelihood as clerks and laborers in Seattle. That a majority of the persons described as heads of families in such suburban towns own their own homes or are paying for the same on the installment plan, and were induced to procure the same at such points by reason of the said rate and its being so long continued.

We further found that since the raise in rates that at least 20 families had moved from Quarry, Duwamish and Allentown, 12 from Tukwila, 18 from Foster and a large number from Pacific City and more or less from all the towns mentioned as suburban towns, and many others were contemplating moving if a reduction in rates was not secured, all by reason of the inability of the residents to pay the increased fare and follow their vocation in Seattle and Tacoma as aforesaid.

Puyallup was served by the Tacoma Railway & Power Company, an allied corporation, by a line running from Fern Hill over an adverse grade, traveling a distance of approximately 16 miles to Tacoma. The defendant company's line via Willow Junction is about 9.94 miles to Tacoma and is over a much easier grade and through a more fertile and populous district. That when the defendant company was asking a franchise from the City of Puyallup, the city, through members of its council, suggested inserting a provision that the rates to be thereafter charged between Puyallup and Tacoma should not exceed the rates then and theretofore charged over the lines of the Tacoma Railway & Power Company, namely, 15 cents single trip and 25 cents round trip. That at such time the manager of the defendant company objected to the insertion of the provision, giving as a reason that it would be an obstacle to the floating of the securities, and indirectly promised that should such franchise be granted the rates would not in the future exceed the rates charged by the Tacoma Railway & Power Company as before stated. That many people live in

Puyallup and earn their livelihood in Tacoma as clerks and laborers.

That the town of Renton is served by the Seattle, Renton & Southern Railway, an electric line extending from Seattle to Renton. That the rates now and heretofore enforced by said last named company is the rate charged by the defendant prior to the 17th day of October, 1909, namely, 15 cents for a single trip and 25 cents for the round trip. That for the year ending June 30th, 1909, the average earnings from passengers going to and from Renton as indicated by the sales of tickets at the different ticket offices amounted to the sum of \$17,254.10, or an average of \$1,438.00 per month; that between June 30th, and the 16th day of October, said sales had increased to an average of \$2,708.00 per month, and between the 17th day of October and the 1st day of January, 1910, while said increased rates were in force, said passenger earnings decreased to \$302.00 per month. That while more passengers proportionately paid fares to conductors after the return fare was discontinued and the ticket sales therefore would not accurately show the number of passengers carried, still during said last mentioned time the earnings of the Seattle, Renton & Southern from passenger business between Renton and Seattle increased more than 150 per cent.

Ticket sales at the Seattle office for travel between Seattle and Foster averaged between June 30th and October 16th, 1909, \$543.34 per month, while between October 17th and the 1st of January such sales decreased to an average of \$66.73 per month; that the same office showed sales between Seattle and Riverton between June 30th and October 16th averaging \$629.45 per month, while between October 17th and January 1st such sales decreased to an average of \$80.35 per month; that the sales indicated from the same office for travel between Duwamish and Seattle averaged between June 30th and October 16th, \$191.25 per month, while between October 17th and January 1st such sales decreased to an average of \$38.12 per month; that as indicated by the sales at the same office the travel between Seattle and Pacific City averaged between June

30th and October 16th, \$355.34 per month, while between October 17th and January 1st such sales decreased to \$130.30 per month. That during the same period the sales of the Tacoma office for travel between Tacoma and Pacific City averaged for the former period \$61.40 per month, for the latter period \$38.95 per month. That the sales of tickets at the Seattle office for travel between Seattle and Tukwila averaged for the former period \$345.91, while for the latter period such sales averaged \$38.96 per month. That the sales of tickets to and from Kent as shown by sales at the ticket offices decreased from an average of \$3,664.35 per month, for the former period, to an average of \$1,460.00 for the latter period.

The greater increase in suburban rates was to points outside and tributary to Seattle, many of such rates being more than doubled, the rates to points suburban to and tributary to Tacoma being increased a much less per cent. An analysis of the earnings from Tacoma to such last named point shows no such falling off in revenue as is shown to points outside of Seattle. For instance, between Edgwood and Tacoma under the old rate of 15 and 25 cents their ticket sales at Tacoma were \$70.00 per month, while under the new rates of 18 and 36 cents the average monthly sales were \$33.00; at Jovita the average monthly sales at Tacoma were \$30.00 and under the new rates of 19 and 38 cents the average monthly sales were \$21.00; that Auburn, under the old rates of 25 and 40 cents, respectively, the average monthly ticket sales were \$553.80 and under the new rates of 29 and 58 cents the average sales were \$316.00 per month; at Kent, under the old rates of 35 and 60 cents, the average monthly sales at Kent and Tacoma were \$449.10 and under the new rates of 39 and 78 cents the average sales were \$237.25.

That during the months of June, July, August, September and part of October, 1909, the A.-Y.-P. fair was in progress in Seattle and would influence the receipts, but the increase in passenger revenue for said months over corresponding months for 1908 was no greater than the increase of other months for 1909 over corresponding months for 1908, until the raise in rates.

Other material facts will be referred to in the opinion. The Commission is asked to reduce the rates to those charged under the schedule in force prior to October 17th, 1909. The first inquiry presented is what sum of money is the company entitled to earn and receive net from rates and fares. This question has been so repeatedly passed upon by the courts as to be well settled.

Providing the company charges no more than the particular service rendered is worth to the patrons, it is entitled to receive a fair return on the value of its property used in the public service. There is no fixed rate of compensation which must be allowed. What would be a reasonable return in one place might be unreasonable in another, and what would be a reasonable return on one class of property might not be on another class situate in the same place. The amount of risk in the business is one of the most important factors. If the investment is of a hazardous nature, a higher return would be justified than where no risk was involved. Generally a reasonable return for a public service corporation is such a return as is expected and usually realized in the locality upon investments for a somewhat similar nature, with regard to the risk attending them.

Wilcox v. Consolidated Gas Company, 212 U. S. 19.

At the time of the construction of this road, Seattle and Tacoma were substantial cities and their future was assured. The valleys traversed had already demonstrated their fertility and adaptability to the raising of fruits and garden produce, and that such valleys would be densely populated, in the very near future, was recognized and admitted by all. The field was ideal for an interurban line; the risk attending the enterprise was even then a minimum, and now the future of the property is beyond question. It has grown constantly and will continue to grow in value, thus entitling the original investors to increasing returns on the money originally expended. On such a property a low rate of return would usually be expected. The evidence is conflicting as to what would be expected as a return in a similar enterprise. Jacob Furth places the rate of interest on Puget

Sound in 1901, on good security, at 7 per cent. Mr. Laffin and Mr. Hill state that, ordinarily, a ten per cent. return would be expected from an investment of this nature. We have, however, in the record, evidence which shows what the people loaning the money, as well as the managers of this property, were satisfied to receive. The Tacoma Railway & Power Company was so run down it could not borrow money. The credit of the defendant was good. We find it issuing its bonds and raising \$2,250,000 for the purpose of, and actually loaning this money to, the Tacoma Railway & Power Company on its promissory notes at six per cent. If managers and lenders were satisfied with a six per cent. return from the moneys loaned on the uncertain security of the Tacoma Railway & Power Company, it seems strange that they would not be satisfied with a similar return from the people on an absolutely sure investment. While we feel that a net return of 7 per cent. is liberal, we also feel that under the decision of the Supreme Court of the United States in *Wilcox v. Consolidated Gas Company*, *supra*, we would not be justified in allowing a less sum.

The value of defendant's property used in this service has been found by the Commission, including working capital and supplies on hand, to be the sum of \$4,070,237. This valuation was arrived at by ascertaining, after a most thorough examination by expert accountants, the amount expended by the company in constructing its lines, which was found, exclusive of working capital and supplies, to be \$2,933,863.69; that it would cost to reproduce the property new at the present time \$4,157,558 (this included an increase in the value of the right-of-way and terminals over what it cost of approximately \$770,000); ascertaining the depreciated condition of the property; ascertaining the reflected value of the property as shown by the amount and value of its stock and bonds (the method followed is set out in the findings), found to be \$3,987,376.23; ascertaining the density of the population and traffic and all other conditions which in the judgment of the Commission would affect the market value of the property.

The defendant insists that in estimating the cost of reproduction of its road (and which should be included in estimating its value), the sum of \$420,500 should be allowed to cover the item of discount. The Commission has declined to allow this sum, or any sum greater than \$150,273.00, which is 5 per cent of 75 per cent. of the cost of reproduction. The amount of discount of necessity depends upon the amount of capital procured from outside sources which goes into the enterprise. It also depends largely upon the margin between the value of the contemplated enterprise and the amount raised from outside sources. In the present case all moneys, including organization cost and preliminary surveys, were covered by the issue and sale of bonds. In the judgment of the Commission, such is not a financial business loan; it is financial speculation. If any loss occurs it must fall on the mortgagee. It follows that, taking all the risk in case the investment is not profitable, the man so venturing his capital will insist on having a handsome margin.

The question must be determined by considering the loan as a financial business undertaking and not wholly as a speculation.

The evidence introduced before the Commission is to the effect that investors are plentiful in well-secured railroad bonds at 5 per cent. That safe or well-secured bonds are such as have behind them the guarantee of an independent solvent or strong road, or where the amount required would not exceed 75 per cent. of the amount invested, providing investigation shows the enterprise to be an inviting one. That in such case the expense necessary to be paid to a reputable broker for making a full and exhaustive investigation into the enterprise and the compensation to be paid him for interesting his clientage into investing must be paid, and this sum is a legitimate and proper item of expense. The evidence further discloses that if 75 per cent. of the cost of this road was to be so secured, 5 per cent of such amount would be ample to compensate a broker for his expense and commission. This is in keeping with the trend of recent and present legislation. Many states now prohibit the

issue of stock excepting it be represented by cash paid in at par value. Will justice result in this case from such holding?

The money to build the road was realized; \$500,000 preferred stock realized \$384,500; \$3,080,393 bonds realized \$2,839,363, which represents the cost in cash of the road and equipment and \$300,000 to cover working capital and supplies on hand; \$405,000 par value common stock was delivered to bondholders as an inducement in selling the bonds. All common stock, excepting \$1,500,000, was traded for other property not included in or used as operating property, and returns on such stock should be derived from the property received in exchange; \$1,095,000 par value of the common stock went to the four banking houses who negotiated the sale of the securities.

By allowing a net return of 7 per cent. on \$4,070,237, the value, the company receives \$284,916.59, to be disbursed as follows: \$30,000, 6 per cent., on preferred stock; \$154,019.65, 5 per cent., on \$3,080,393 worth of bonds; \$28,350, 7 per cent., on \$405,000 common stock, leaving a net balance of \$72,546.94 per annum to the syndicate of bankers for negotiating the sale of the securities. Truly a handsome compensation for the brain energy expended.

The net earnings of the company for the year 1909 were \$273,653.78. If there be deducted from this sum \$60,011.73, the additional amount necessary to set aside to cover depreciation, it would show a net return of \$213,642.05. A 7 per cent. return on \$4,070,237 amounts to \$284,916.59. This shows a deficit of \$91,274.54 per year under the old rates. This additional amount the company is entitled to make from its rates and fares, provided, as before stated, the amount charged its patrons is no more than the particular service rendered is worth. This operating expense includes a sufficient sum to be either expended in replacements or set apart to cover depreciation and replacement. A public service corporation is clearly entitled from its operating revenues to not only earn a reasonable return, but to maintain unimpaired its capital. On the defendant's road there are, approximately, 7 miles or 13 per cent. of its track constructed on pile trestles. The average life of this

structure is not to exceed ten years. Ties must be renewed on an average of every seven years. Equipment not only wears out but becomes inadequate and obsolete, and so with practically all its physical properties excepting real estate. In ascertaining the cost of reproducing this property the Commission deducted from its estimated cost, new, approximately \$500,000 by reason of its depreciation. The first few years of life of such a property calls for no renewals, but the property is daily growing older and the traffic then moved should bear its portion of the burden dependent upon depreciation, and not throw this full burden on the traffic moving when heavy renewals become necessary. The defendant company, however, insists that not having provided a depreciation fund in the past, it is entitled out of the traffic now moving to charge rates that will not only care for the average depreciation but in addition make up the deficiency in this depreciation account accruing in the past. The only authority called to our attention, or which we have been able to find, which, it is claimed, tends to support the defendant's contention is *Metropolitan Trust Co. vs. Houston & T. C. R. R. Co.*, 90 Fed. 683. This decision was rendered on an application for an injunction, supported by affidavits and resisted by counter affidavits.

The court in discussing the case, as presented by the affidavits, shows that the road had cost in construction and in betterments and improvements \$62,000 a mile; that its stock and bonded indebtedness equaled \$53,000 a mile; that the Texas Commission, in valuing the property, had not considered or allowed anything for the favorable location of the road or the increment to its value by reason of the settlement of the country and its advance in prosperity, nor anything for the settling and seasoning of the road, nor its established business, nor any account of betterments made necessary by the growth of trade. After making the above suggestions, the Court further states: "The Commission states that in estimating the value of these roads they included interest on the money invested during the period of construction. This is somewhat vague, but

the 'period of construction' mentioned is probably limited to the time when each section of the road was opened to the public for business. And even if extended to the time when the road was completed to Denison and to Austin in 1873, nearly 20 years after its construction was begun at Houston, it would not cover all of the time, and possibly not nearly all of the time, in which the railroad company and its predecessors have lost interest on the investment."

This language, it is contended, justified the conclusion that in ascertaining the value, losses incurred in the past, or inability to make a return, are elements that of themselves should be considered and added to the investment and to the cost of reproduction.

If this position is sound, it must follow that the more worthless a road is in point of earning ability, the more valuable it becomes as time passes. The Circuit Court was dealing with the elements that should be considered in ascertaining the value upon which a return should be allowed rather than the amount of the return itself. The elements considered by the Commission, as demonstrated by the findings, including the advantageous location, the enhanced value of its right-of-way and lands and the increased volume of business owing to the development of the country, cover every element criticised by the Court as not having been considered by the Texas Commission, and the conclusion reached by us is in accord with the decision.

Traffic of today should pay enough to secure a fair return on the property and maintain unimpaired the capital invested, but cannot be called upon to bear burdens that should have been borne by traffic in the past.

The qualification that the company cannot charge more than the particular service is worth to the shipper (patron) is clearly settled:

Covington etc. Turnpike Co. vs. Sanford, 164 U. S. 578;
San Diego Land Co. vs. National City, 174 U. S. 939;
Interstate Commerce Commission vs. B. R. Co., 118 Fed.
613;

Kennebeck Water Co. vs. Waterville, 97 Me. 187;
Water District vs. Water Co., 99 Me. 371;
Smith vs. Ames, 169 U. S. 466;
Thurber vs. New York Central & H. R. R. Co., 2 I. C.
C. 742;
Delaware State Grange vs. N. Y., P. & N. R. Co., 3 I.
C. C. 554;
Beale & Wyman, Railroad Rate Reg., Sec. 320-321.

In *Covington and Turnpike Company vs. Sanford*, *supra*, Justice Harlan says: "When the question arises whether the legislature has exceeded its constitutional power in prescribing the rates to be charged by a corporation controlling a public highway, stockholders are not the only persons whose rights or interests are to be considered. The rights of the public are not to be ignored. It is alleged here that the rates prescribed are unreasonable and unjust to the company and its stockholders. But that involves an inquiry as to what is reasonable and just for the public. If the establishing of new lines of transportation should cause a diminution in the number of those who need to use a turnpike road, and consequently a diminution in the tolls collected, that is not itself a sufficient reason why the corporation operating the road should be allowed to maintain rates that would be unjust to those who must or do use its property. The public cannot properly be subjected to unreasonable rates in order simply that stockholders may earn dividends. The legislature has the authority in every case, where its power has not been restrained by contract, to proceed upon the ground that the public may not rightfully be required to submit to unreasonable exactions for the use of a public highway established and maintained under legislative authority. If a corporation cannot maintain such a highway and earn dividends for stockholders, it is a misfortune for it and them which the Constitution does not require to be remedied by imposing unjust burdens upon the public. So that the right of the public to use the defendant's turnpike upon the payment of such tolls as in view of the nature and value of the service rendered by the company are reasonable, is an element in the general inquiry

whether the rates established by law are unjust and unreasonable. * * * In short, each case must depend upon its special facts; and when a court, without assuming itself to prescribe rates, is required to determine whether the rates prescribed by the legislature for a corporation controlling a public highway are, as an entirety, so unjust as to destroy the value of its property for all the purposes for which it was acquired, its duty is to take into consideration the interests both of the public and of the owner of the property, together with all other circumstances that are fairly to be considered in determining whether the legislature has, under the guise of regulating rates, exceeded its constitutional authority, and practically deprived the owner of property without due process of law."

In *Smith vs. Ames, supra*, the same learned judge used the following language: "It cannot, therefore, be admitted that a railroad corporation maintaining a highway under the authority of the state may fix its rates with a view solely to its own interests and ignore the rights of the public. But the rights of the public would be ignored if rates for the transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public or the fair value of the service rendered, but in order simply that the corporation may meet operating expenses, pay the interest on its obligations, and declare a dividend to stockholders. * * * What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."

The phrase under consideration was very carefully analyzed by the Supreme Court of Maine in *Water District vs. Water Company, supra*: "They (water company) are entitled to charge reasonable rates. 'Reasonable' is a relative term and what is reasonable depends upon many varying circumstances. An equivalent to the prevailing rate of interest might be a reasonable return and it might not; it might be too high or too

low; it might be reasonable owing to peculiar hazards or difficulties in one place to receive greater returns there than it would in another upon the same investment. Then, their reasonableness relates to both the company and the customer. Rates must be reasonable to both, and if they cannot be to both, they must be to the customer. That the amount of the investment does not control either way is decided in *Syndicate Land & Town Company vs. Jasper*, 189 U. S. 439. * * * The public—that is, the customers—may demand that the rate shall be no higher than the services are worth to them, not in the aggregate, but as individuals. The value of the service in itself is to be considered *and not exceeded*. The company engages in a voluntary enterprise. It is not compelled at the outset to enter into the undertaking. It must enter, if at all, subject to the contingencies of the business and subject to the rule that its rates must not exceed the value of the service rendered to its customers. * * * The company is only entitled to fair returns in any event and ‘fair’ to the customer as well as to itself. In the aspect now being considered the worth of the water service to its customers does not mean what it would cost some one individually or some few individuals to supply themselves, for one might be blessed with a spring and another might have a good well; it means the worth to the individuals in a community taken as a whole; it is the worth to the customers not as individuals but as individuals making up a community of water takers.”

In *Delaware State Grange vs. New York P. & N. R. Co., Interstate Commerce Commission, supra*, the Commission says: “Conceding always that the carrier renders its service for hire and is entitled to fair remuneration, which must necessarily include the cost of the service, a contribution to fixed charges, and something besides in the form of profit, the question arises, how large a carrier’s margin of profit should be to render its charges reasonable to the patrons whom it serves. It is manifestly quite as important on public grounds that the citizens who furnish a carrier with business from the pursuits in which they are engaged should not be oppressed with rates that are

disastrous to their pursuits as that a carrier should not be required to perform its services at a loss. The public good requires that benefits as well as burdens shall be justly distributed, and that one interest shall not profit unduly at the expense and to the serious prejudice of another. This is the spirit of the law. A carrier has the peculiar advantage of being able to apportion its aggregate expense upon its whole business, but a grower of fruit or of grain or a manufacturer cannot do so. The product he markets must alone bear the transportation expense, and if this is excessive and deprives him of any return upon his investment or from his labor or skill, his business is ruined and a public injury is sustained. * * * A carrier cannot expect to absorb so much of the market price in its charges that the producer will be obliged to abandon his business. It is not meant by that that a carrier should transport freight at a loss to itself. If a market cannot be reached except at a loss with freight upon which only a just transportation rate is charged, it is no longer a legitimate article of commerce, and a carrier is under no duty to transport it at his own expense. But the principle intended to be impressed is that if a rate is so high as to yield a large profit to a carrier and to deprive its patrons of any profit and make their business ruinous, then the interests of its patrons and the general public interests as well require the carrier to remit a portion of its profits, and accept a rate more equitable both to carrier and patron. This is indispensable to make a rate reasonable and just."

In *Thurber vs. New York Central and Hudson River R. R.*, *supra*, the Interstate Commerce Commission used the following language: "The public character of carriers and the public interests affected beneficially or injuriously by the condition of the service rendered require a just degree of consideration for those interests, and in general it is believed they are not disregarded, though in some, and perhaps many, instances injustice may be done by too much concern for the carrier and too little for the public. As was said in the second annual report (*ante* p. 253), the Commission has laid down the principle that the

carriers in making rates cannot arrange them from an exclusive regard to their own interest, but that they must respect the interests of those who may have occasion to employ their services, and subordinate their own interests to the rules of relative equality and justice which the act prescribes."

Other citations are unnecessary.

We will refer briefly to the testimony that we deem applicable to and bearing upon the principle just discussed. The testimony is practically undisputed that from 60 to 90 per cent. of the heads of families living in the towns and villages described in the foregoing statement as suburban obtain their livelihood as wage-earners, as clerks, mechanics and laborers, in the cities of Seattle and Tacoma; that they own or are paying for their homes on the monthly installment plan. That under the rate of fares prior to October 17, 1909, it would be as cheap or cheaper for them to occupy their homes as to live in suburbs of Seattle and Tacoma and pay the 8 cents a day for street car fare, but that under the increased rates they could not afford to live in their homes, but per force must abandon them and find homes at points reached by the cheaper street-car lines. That they were induced to purchase and settle in these suburban towns by reason of the long-continued rate and relying upon the presumption that such long-continued rate would not be increased. That practically 100 families had already left and abandoned their homes in these towns and many others were awaiting the determination of this hearing, intending to leave if relief was not granted from the increased rates. In the language of Justice Savage, what is this service worth to the patrons as individuals, but as individuals making up a community of constant travelers? It clearly is worth no more than they can pay and live, and, under this testimony, they cannot live and pay more than the old rates. It is not the purpose of the Commission to intimate that a rate less than the cost of the particular service should or would be enforced in any case. If traffic cannot pay the movement cost, it ought not to become a burden upon the other traffic. It will

not be contended, however, that the old rates did no more than compensate for the moving cost. The evidence clearly establishes that the present rates to the suburban towns are more than the service is worth to the patrons. Earlington and Renton stand in a little different position. The value of the service to these people is affected by the competition, and as to Earlington, semi-competitive service of the Seattle, Renton & Southern Railway. The evidence shows that Earlington is populated by wage-earners, and while the defendant company's line runs through the town, the inhabitants, in order to make both ends meet, walk a distance of from a mile to a mile and a half to take advantage of the lower rate on the other road. At Renton a very large number (but not so large a per cent.) are wage-earners in Seattle, and at the present time practically all travel via the competitive line, which continues to charge the former rates. Puyallup occupies a situation similar to Renton except that the Tacoma Railway & Power Company has advanced its rates to meet the advance of the defendant company, but with the additional equity that at the time of securing the franchise to lay its tracks along the streets of Puyallup the defendant company, through its manager, indirectly promised that the then rate of 15 cents and 25 cents for the single and round-trip fare respectively would not be exceeded if the provision limiting the fare to that amount were not inserted in the franchise.

The evidence introduced before the Commission further demonstrates that throughout the country what might be termed suburban fares out of populous centers are less than the local fares between the stations on the line and less than the fares charged for a longer distance over the same tracks when in point of distance the suburban district is passed. An examination of the tariffs of interurbans throughout the country filed with the Commission in this case demonstrates that while out of populous centers the rate of fare is as low and in several instances lower than the old rate to points out of and suburban to Seattle and Tacoma, the rates between local points and the rates after the suburban point is passed is generally not

less than two cents per mile. A few instances will suffice. On the Ohio Electric Railroad the line leading from Lima to Fort Wayne, a distance of 64.8 miles, the road runs through Elida, Delphos, Middlepoint, Van Wert, Convoy, Dixon, Monroeville and New Haven, the rate between local points being an average of two cents per mile; from Lima to Toledo, running through a large number of towns, the same two-cent rate prevails; from Cincinnati to Dayton, running through towns having a population as shown by the census of 1900 of 453,487, the rate between local stations is two cents per mile; that on the Orchard Lake division of the Detroit United Railway the local fare between intermediate stations is two cents per mile. Out of Detroit, however, the suburban rate applies at a much lower rate. On the Columbus-Zanesville division of the Ohio Electric Railway the rate between stations intermediate and not including Columbus is practically two cents per mile. On the Indiana Union Traction Company, leading out of Indianapolis, the local fare between stations intermediate is two cents a mile. Numerous other instances might be quoted, but it is sufficient to say that the rate on all interurban lines for intermediate stations (and stations not figured as suburban) averages, throughout the country, two cents per mile.

Many features must be considered in determining whether a rate is or is not reasonable. The whole schedule must be considered when judging its fairness to the company, and if from all its revenue it receives but a fair return and the patron is charged no more in each particular case than the service is worth, *per se* the rates cannot be said to be unreasonable.

The conclusion reached by the Commission will result in the occasional traveler from the points not deemed suburban paying a greater rate per passenger mile than will the traveler within such suburban district. This is an apparent but not a real discrimination; the discrimination is not unjust, nor are the points outside the suburban district subjected to undue prejudice. The entire community is interested in the owners of the suburban homes being able to use and occupy them, in the building up of such points and relieving the congested

condition of the cities. The traveler from the district not suburban is entitled to be carried at a reasonable rate, but not necessarily as cheaply per passenger mile as the resident of the more favored district. The Interstate Commerce Commission on this point says: "The granting of commutation rates for suburban travel is quite general, and such rates are defensible on various grounds. They tend to benefit the public by permitting and inducing residence at considerable distance from the place of occupation, thus aiding the territorial growth of cities and relieving their congested districts."

Spriggs vs. Baltimore & Ohio Ry., I. C. C. 443.

A comparison of the rate charged generally for a specific service of other roads under normal conditions, together with a comparison of the relation of such rates both to the carrier and the shipper, furnish a good test to judge of the reasonableness of such particular rate. We can see no reason why if local rates on roads through the older settled portions of the country at two cents are deemed reasonable and are generally charged, that a similar rate between local intermediate points not suburban on the defendant's line would be *per se* unreasonable or excessive unless the company was earning more than a reasonable return on the value of its property.

Residents of Seattle and Tacoma have the advantage of water competition when desirous of traveling between these points, with a two-hour service, and unless the rate is *per se* excessive, the evidence shows no extraordinary or peculiar circumstances to exist calling for the reduction of this charge.

The defendant is now issuing commutation tickets good between Seattle and Tacoma and suburban points at greatly reduced rates over the regular tariff, which it claims meets the needs of the clerks and mechanics, laborers and other constant travelers. Such commutation tickets are, however, issued in books of 50 rides, not transferable, void after one month if not used. The evidence discloses that very many of these laborers would be employed on an average of but four days a week, consequently the commutation ticket could not be fully used up,

thus prohibiting its purchase and use. The rates charged for commutation tickets are practically 1.4 cents per passenger mile.

Reference to the effect on the defendant company of a reduction in rates to the points named as suburban towns might not be out of place. Under the evidence in this case these towns will be largely depopulated and travel consequently greatly decreased if the present rates are maintained. This can only operate in a diminution of the net receipts of the company, and, considering alone the interests of the defendant, these suburban rates should be reduced to a point where the people can afford to occupy the homes which they have and are procuring.

As shown by the findings heretofore referred to, based on the business for the past year, the through passenger business between Seattle and Tacoma furnished 56.8 per cent. of the total passenger revenue, or \$285,026.05 per year. Mr. Dimmock, manager, and Mr. Laffin, district manager, both testified that in their judgment, based upon the experience gained under the new rates which have been in force for four months, that when conditions are normal they will carry comparatively an equal number of passengers between these points at the advanced rate as they would under the old rate. The increase in this rate is practically 23.37 per cent., and under these rates the net earnings would be increased from this source alone \$66,610.59 per year. It will be impossible to demonstrate the amount received by the company from fares between local points, as conductors have not kept an account of such sales in the past, but have turned all such collections in as local fares; but unquestionably the increase from single trip passengers will amount to a sum in excess of the \$3,000.00 estimated in the findings.

The managers of the defendant company's line are also managers of the Seattle Electric Company, through which trackage rights into Seattle are gained, and they are also managers and the defendant company practically owns the Tacoma Railway & Power Company, with which it has trackage rights into Tacoma; and they also manage the Puget Sound Power

Company, from which the defendant purchases its power. These facts necessitated the most careful scrutiny into the reasonableness and fairness of the different contracts, and we will now briefly discuss these contracts. Investigation of the settlements made between the defendant and the Tacoma Railway & Power Company and the Seattle Electric Company convinces the Commission that the accounting officers have misconstrued the contract between the parties to the detriment of the defendant company. The present contract provides for the leasing by the defendant to the Seattle Electric Company of certain tracks, and its trains and equipment after the same have reached the old south boundary line of Seattle, between 500 and 600 feet south of Spokane avenue; provides for the Seattle Electric Company operating such trains within the city limits, and that it should be entitled to all the earnings therefrom. It provides that whenever the defendant sells a ticket or collects a fare entitling the purchaser to transportation within the city of Seattle, the defendant shall be charged with 5 cents, or such proportionate amount, where the purchaser is entitled to transportation under the franchise of the Seattle Electric Company at less than full cash fare and such lesser fare only is collected. Provision is made for an accounting each month. Section 10 of the contract reads as follows: "The Seattle company will also during the life of this contract pay to the interurban company for the trackage rights granted to it by the interurban company and for the use of the leased cars and trains * * * a sum equal to $3\frac{1}{4}$ cents for each passenger carried on such leased cars within the city limits of the city of Seattle north of the old city limits, paying full cash fare and a proportionate part of such sum when passenger is entitled under the franchise of the Seattle Company to transportation on the cars of the Seattle Company at less than full cash fare and pays such lesser fare only."

Under the contract existing prior to July 1st, 1909, the defendant collected the fares for transporting the passengers within the city of Seattle, and such fares became a part of its

gross passenger revenue, the amount to be paid to the Seattle Electric Company being operating expenses, and so charged. Under the new contract this operating expense is wiped out and the amount paid the defendant by the Seattle Electric Company is treated as revenue, the gross revenue being reduced by the difference between five cents formerly credited and the $3\frac{1}{4}$ cents now received.

The defendant in its annual report to the Commission for the year ending June 30, 1909, treated this contract as retro-active for the whole fiscal year in so far as the method of treating operating expenses and gross revenue was concerned. The settlements as made show that the number of passengers presenting transfers showing a cash fare of 5 cents paid conductors of the Seattle Electric Company and the Tacoma Railway & Power Company were first deducted from the total number of passengers carried within the city, and two cents (the amount provided in the old contract) per passenger was allowed the defendant on the balance of the passengers carried, no credit whatever being given for passengers carried in such leased cars presenting such transfers. The Commission feels that the old contract will not bear such construction, but, irrespective of the construction placed upon the old contract, the present contract can, under no circumstances, bear the construction which the accounting officers have placed upon it; but the defendant company is entitled to receive for the use of its leased cars three and one-fourth cents for each passenger carried in such cars within the limits of the city. This mode of settlement has been continued from July 1st to the present time, crediting, however, $3\frac{1}{4}$ cents per passenger, and no credit whatever has been given for carrying passengers on such leased cars within the limits of the cities where the transfers have been issued by conductors of the terminal lines. That during the fiscal year ending June 30, 1909, there were 224,045 passengers so carried within the city of Seattle, the defendant company receiving nothing from the Electric Company for so carrying them in the leased cars. And there were carried within the city of Tacoma during said time 65,462 passengers for which the defendant company re-

ceived no compensation. Had the present contract been in force and observed the net earnings of the defendant company from this construction of the contract alone would have been increased from the Seattle end \$4,480.90 and from the Tacoma end \$1,309.24. If the same number of passengers are carried during the present fiscal year as were carried for 1909, the net increase arising from allowing $3\frac{1}{4}$ cents instead of two cents per passenger in Seattle will amount to an additional \$26,484.54 less two per cent. gross income city tax on the increased amount received.

By letting the present rate stand between Seattle and Tacoma, and conceding the judgment of the manager and district manager to be correct, the increase from through business should be not less than \$66,610.59; the increase from the changed contract with the terminal companies, by which the defendant receives $3\frac{1}{4}$ cents instead of two cents as before, will net it not less than \$26,434.54. A proper construction by the accounting officers by which $3\frac{1}{4}$ cents is allowed for passengers paying cash fare to the terminal companies will further increase its revenue approximately \$5,790.14, making a total increase in revenue over the preceding year, assuming that the same volume of business is carried on, of \$98,885.27, and, in addition to this, will be the increased revenue derived from the travel to the points not treated as suburban and not taking advantage of the commutation provision hereinafter provided for, estimated in the findings at \$3,000.00. The Commission is satisfied that this increase will more than make up the deficit figures on the 1909 business, and hereinbefore specifically set out.

The Commission has not in estimating the future operating expenses of the defendant been unmindful of the probable necessity in the near future of advancing the wages of its employes to meet the increased and increasing cost of living. The amount paid in wages, however, amounts to approximately 24 per cent. of the operating expenses, or \$100,000.00, and, judging the future increase in business by the constantly increasing business of the past, any reasonable advance in wages should be more than offset by the increased revenue due to development of

the territory traversed, the growth of the cities and the additional travel resulting therefrom. The Commission scrutinized the contract entered into between the defendant company and the power company. A copy of the contract is on file with the Commission, and provides that the defendant shall pay \$2.23 per kilowatt per month for the full amount of 4,750 kilowatts for power delivered on the defendant's right-of-way at its power stations. This amounts to \$20.16 per horse power per year. The Commission has inquired carefully into the charges made by all power companies selling power within the state, and are satisfied that the contract is as cheap as any other company is selling its power under similar conditions. The fact that the managers of the corporation might be the same in no wise demonstrates that the stockholders are the same. The evidence in this case shows that Stone & Webster and their immediate clients hold but 25 per cent of the capital stock and bonded indebtedness of the Puget Sound Electric Railway, the remaining bonds and stocks being owned by Lee Higginson & Company, Kidder, Peabody Company, and Forbes Company, and their immediate clients.

The inquiry in such cases must be confined as to whether the defendant company is paying more than a fair price for its power, and on this point the Commission is satisfied with the fairness of the contract.

We have fully appreciated that the development of the state will be greatly aided by the building of interurban lines of electric railways; that large capital is necessary for such purpose, and that a policy should be adopted by the executive officers of the state that will not deter capital investing in such enterprises.

It was urged during the hearing that a reduction in the rates could only have the effect of discouraging capital from seeking this state for investment in public service corporations.

The Commission believes that a policy by which the increment growing from the development of the valleys and regions so opened by similar construction is added to and becomes a part of the sum on which a return is calculated, and upon this increased amount a net return, after ample allowance for de-

preciation and exigencies, of 7 per cent., is allowed, will be as attractive to capital as any legitimate investment in the country.

The following order is entered:

BEFORE THE RAILROAD COMMISSION OF
WASHINGTON,

[No. 76.]

THE RAILROAD COMMISSION OF WASHINGTON, *ex rel.* W. H.
PAULHAMUS, *Complainant*, v. PUGET SOUND
ELECTRIC RAILWAY, *Defendant*.

ORDER.

This cause coming on regularly to be heard and it appearing to the Commission that the cause has been duly and regularly tried, that findings of fact have been made in writing and are now on file herein, and the cause having been duly submitted to the Commission and the Commission being fully advised in the premises,

IT IS NOW ORDERED, That the present round-trip fare, being twice the single published rate from Seattle to points south of Englewood and as far south as and including Renton Junction, and from Tacoma to points north of Tidehaven and as far north as and including Algona, be and the same are hereby declared to be unjust, unreasonable and excessive, and it is ordered that the same be not hereafter charged to persons desiring round-trip tickets between such points, and in lieu thereof and to take the place of such charges it is ordered that the round-trip rates in force prior to the 17th day of October, 1909, to such points, be reinstated, published and charged in the future.

That the present round-trip rates between Tacoma and points on the branch line between Willow Junction and Puyallup be and the same are hereby declared to be unjust, unreasonable and excessive, and that the same be not charged in the future, and to take the place of such round-trip rates between Tacoma and the points on such branch line the round-trip rates and

fares charged prior to October 17th, 1909, be reinstated, published and charged in the future.

That the present round-trip rates being twice the single published rate from Seattle to Earlington and Renton, be and the same are hereby declared to be unjust, unreasonable and excessive, and that the same be not charged in the future, and that to take the place of such round-trip rates between Seattle and such points there be charged in the future a round-trip rate between such points not to exceed thirty cents between Seattle and Earlington and thirty-five cents between Seattle and Renton.

That the round-trip rates between Seattle and points other than those above named and between Tacoma and said last named points charged prior to October 17th, 1909, be reinstated, published and charged in the future, unless the defendant company agrees to issue commutation tickets good between Seattle and Tacoma and such points requiring not to exceed 32 rides in one month at rates for single rides not to exceed one-half the charge for round-trip tickets prior to October 17th, 1909, and in the event of the defendant company filing with the Commission within twenty days from this date its tariff providing for such commutation books between such points, then and in that event that portion of this order providing for round-trip tickets between Seattle and points on the main line south of Renton Junction and between Tacoma and points on the main line north of Algona shall not be effective.

It is further ordered that that portion of the complaint asking for a reduction of the single fare, and that portion asking for a reduction between local stations and not touching Seattle or Tacoma and that portion asking for a reduction between Seattle and Tacoma be and the same is hereby denied.

It is further ordered that in view of the fact that if the rates herein established be published in conjunction with the rates now existing and not affected by this order, that the tariff so published will be inharmonious and will result in the combined sum of two or more local rates between terminals being less

than the through published rates, as well as being less from points near the suburban limits mentioned, and the Commission feeling that a harmonious tariff consistent with this order can be prepared, and believing that under the circumstances the defendant company should be permitted to prepare and submit such tariff to the Commission, it is further ordered that the defendant company have and it is hereby given ten days from the date of the service of this order upon it to prepare and file with the Commission a new complete tariff consistent with this order, and in case of its neglect or failure so to do, the Commission will at the expiration of such time issue a supplemental order providing for a new and complete tariff and the rates to be hereafter charged between all points on its line.

Witness the Railroad Commission of Washington this 26th day of February, 1910.

THE RAILROAD COMMISSION OF WASHINGTON,

By H. A. FAIRCHILD, *Chairman*.

J. C. LAWRENCE, *Commissioner*.

JESSE S. JONES, *Commissioner*.

Attest:

F. M. LARNED, *Secretary*.

BEFORE THE RAILROAD COMMISSION OF
WASHINGTON.

[No. 76.]

THE RAILROAD COMMISSION OF WASHINGTON, *ex rel* W. H.
PAULHAMUS, *Complainant*, v. PUGET SOUND ELEC-
TRIC RAILWAY, *Defendant*, TOWN OF PUYALLUP,
Intervenor.

FINDINGS OF FACT.

This cause coming on regularly to be heard before the Railroad Commission of Washington, pursuant to notice duly given on the complaint of the plaintiff at the time specified in the said notice, the plaintiff appearing by H. A. Fairchild, John C. Lawrence and Jesse S. Jones, and by W. V. Tanner, assistant attorney general, as counsel for the plaintiff, and the defendant appearing by B. S. Grosscup, its attorney, and all parties having announced themselves ready to proceed with the hearing, whereupon the town of Puyallup, by B. F. Jacobs, its attorney, filed its complaint in intervention, which complaint was duly filed and a copy thereof served upon the attorney for the defendant, and the said town of Puyallup was permitted to intervene and its appearance was duly entered in said cause as intervenor, whereupon all parties again announced themselves ready to proceed with the hearing, and evidence having been introduced and submitted by and on behalf of the plaintiff, by and on behalf of the defendant and by and on behalf of the intervenor, and each of the parties having announced that they had no further testimony to offer, the cause being duly submitted to the Commission and the Commission having duly considered the evidence and being duly advised in the premises, does now make and render the following findings of fact:

FINDING No. 1.

The hearing of this cause having been consolidated with cause No. 74, the same being a hearing for the purpose of

ascertaining the value of the property used by the defendant in the public service and being the property in controversy in this cause, in so far as the taking of testimony and argument was concerned, and findings of fact having been duly made and rendered in said valuation hearing upon the evidence introduced and heard in such consolidated cause, and such findings having been duly offered in evidence in this cause, the same are now adopted and made a part of the findings in this cause, that is to say, findings numbered 1 to and including finding No. 31 in said cause, such findings being in the words and figures following, to-wit:

“BEFORE THE RAILROAD COMMISSION OF
WASHINGTON.

[No. 74.]

THE RAILROAD COMMISSION OF WASHINGTON, *Complainant*, v.
THE PUGET SOUND ELECTRIC RAILWAY, *Defendant*.

FINDINGS OF FACT.

This cause coming on regularly to be heard before the Railroad Commission of Washington pursuant to notice duly given on the complaint of the plaintiff notifying the defendant that at this time and place a hearing would be entered upon for the purpose of ascertaining the value of its property used in the public service, the plaintiff appearing by H. A. Fairchild, J. C. Lawrence and Jesse S. Jones, commissioners, and by W. V. Tanner, assistant attorney general, as counsel for the plaintiff, the defendant appearing by B. S. Grosscup, its attorney, and all parties having announced themselves ready to proceed with the hearing, and evidence having been introduced and submitted by and on behalf of the plaintiff and by and on behalf of the defendant, and each of the parties having announced that they had no further testimony to offer, and the cause being duly submitted to the Commission and the Commission having duly

considered the evidence and being fully advised in the premises, does now make and render the following findings of fact:

FINDING No. 1.

That the defendant Puget Sound Electric Railway is a corporation organized and existing under and by virtue of the laws of New Jersey, and has complied with the laws of the State of Washington authorizing it to conduct and carry on business in the State of Washington as a common carrier engaged in the operation of the railway lines hereinafter specifically described.

The defendant is the successor in interest of the Seattle-Tacoma Interurban Railway. That the Seattle-Tacoma Interurban Railway was a corporation organized under the laws of the State of Washington for the purpose of constructing a line of electric railroad extending from Seattle to Tacoma. It was promoted and organized by a syndicate composed of the banking houses of Stone & Webster, Lee, Higginson & Company, Kidder, Peabody & Company, and J. M. Forbes & Company. That each of said banking houses agreed to advance one-fourth of the cost and expense incurred in the construction of such road and each was to own a one-fourth interest in the enterprise and property. For the purpose of securing a basis for a stock and bond issue, the syndicate entered into a contract with Karl G. M. Miller for the construction and equipment of the line, agreeing to deliver to Miller in payment therefor \$1,250,000 par value of first mortgage bonds, \$400,000 par value of preferred stock, and \$1,249,300 par value of common stock of the Seattle-Tacoma Interurban Railroad. Miller was not the real party in interest, the contract being performed by Stone & Webster for the syndicate.

The syndicate had anticipated the cost of the road would not exceed \$1,500,000 in cash, but as the work progressed it found it necessary to raise further cash to an amount approximating \$600,000, and a modification of the so-called Miller contract was made as the basis of a further issue of stock and bonds. By this modified contract Miller was to receive \$1,250,000 of bonds,

\$500,000 preferred stock, \$1,499,300 of the common stock, and \$500,543.98 of promissory notes of the corporation.

The entrance into the cities of Seattle and Tacoma, without incurring a large expenditure for terminal grounds, tracks and franchises was an important matter.

Stone & Webster interests had the control in the management of the Seattle Electric Company's lines, through which the syndicate could gain an entrance into Seattle. About this time the syndicate conceived the idea of securing control of the Tacoma Railway & Power Company, so as to control the entrance into Tacoma, and a majority of the capital stock of the said last named company was bargained for. For the purpose of a basis for a further stock and bond issue to raise money to cover this purchase, a new contract was entered into with J. E. Carroll, by which Carroll was to secure all of the properties and securities agreed to be turned over to Miller, was to complete the Miller contract, procure \$1,764,600 par value of the stock and \$298,087.14 of the outstanding promissory notes of the Tacoma Railway and Power Company, procure certain timber property and the saw mill at Milton (presumably purchased and owned by Miller, but purchased by the syndicate), which last mentioned property had cost \$106,514.90, and furnish \$65,743.12 in cash and cause to be retired and procure the second mortgage bonds of the Tacoma Railway & Power Company (which last item cost the sum of \$119,503.71), and upon the surrender by Carroll of the above mentioned properties and securities to the Puget Sound Electric Railway, which had in the meantime been organized, the last named company was to turn over to Carroll (for the syndicate) its securities as follows: Bonds, \$2,300,000 par value; preferred stock, \$624,100 par value, and common stock, \$3,273,400 par value. Carroll was not the real party in interest, but this agreement was carried out by Stone & Webster for and representing the syndicate.

In pursuance of this agreement, all the liabilities of the Seattle-Tacoma Interurban Railway were turned over to the Puget Sound Electric Railway, the syndicate received the securities of

the Puget Sound Electric above specified, and by indenture the properties of the Seattle-Tacoma Interurban Railway were transferred to the Puget Sound Electric Railway, and the Seattle-Tacoma Interurban was practically dissolved.

The interurban road constructed under the so-called Miller and Carroll contracts consisted of a single track from the Seattle old city limits to the Tacoma old city limits, amounting to 32.01 miles of track, and the Renton branch, consisting of 2.96 miles of track, and was formally turned over to the Puget Sound Electric Railway on April 1st, 1903, although it had been operated by the syndicate since September 26th, 1902.

Since the property was turned over, the Puget Sound Electric Railway has double-tracked a large portion of its line, constructed the Tideflats line, the East P street line and constructed certain lighting plants at Kent, Auburn, Milton and other points along its line; has procured control of the Tacoma Railway & Power Company, the Pacific Traction Company, and loaned a large sum of money to the Tacoma Railway & Power Company.

The cash actually paid out and disbursed by the syndicate for the acquisition of these properties was the sum of \$6,542,-937.47, disbursed as follows:

Building the interurban prior to April 1st, 1903.....	\$1,942,657	54
Money subsequently expended completing original contract.....	11,064	28
Cash paid for stock of T. R. & P. Co.....	253,463	47
Expended for mill and timber lands.....	106,514	90
Cash expended retiring T. R. & P. 2nd mortgage bonds.....	31,503	71
Interest paid during construction.....	92,289	28
Working capital	407,488	61
Cash paid for stock re Pacific Traction Co.....	426	00
Cash paid settlement litigation with George Blanchard....	35,280	00
Expended in additions and betterments.....	1,279,562	47
Moneys loaned T. R. & P. Co.....	2,382,687	27

The cash so expended by the syndicate was received from the following sources:

<i>Item.</i>	<i>Par Value.</i>	<i>Amount realized.</i>
Preferred stock	\$500,000	\$384,500 00
Bonds (sold in blocks).....	1,350,000	1,248,750 00
Bonds (sold abroad).....	950,000	871,009 54
Bonds	1,890,000	1,714,265 00
Convertible notes	500,000	448,750 00
Notes	1,000,000	1,000,000 00
Current notes	615,000	584,250 00
Total.....		\$6,251,524 54

The excess of the amount disbursed over the amount realized is accounted for from turning in the profits of the lighting plants, reduction of working capital, and the surplus between the interest paid (6%) by the Tacoma Railway & Power Company and the interest on the bonds (5%).

Of the \$1,942,657.54 above mentioned as money expended in building the interurban, \$186,954.50 was money paid Stone & Webster by the syndicate for the engineering and supervising and acting as purchasing agents and managers during construction; the balance appears to be moneys paid out for material, labor and services outside of any member of the syndicate.

In addition to the properties above described as procured for cash, and the cash payments therefor, the defendant company turned over the following of its securities in exchange for the following properties:

\$1,774,300 par value of its common stock was exchanged, in addition to the cash payment of \$253,463.47 above mentioned, for \$2,000,000 par value of the common stock of the Tacoma Railway & Power Company, the Puget Sound Electric Railway, in addition, guaranteeing the payment of the principal and interest of the Tacoma Railway & Power Company bonds, amounting to \$1,310,000 par value.

\$198,800 par value of its common stock was exchanged, in addition to the cash payment of \$426.00 above mentioned, for \$250,000 par value of the preferred stock of the Pacific Traction Company, and \$1,250,000 par value of the common stock of such last named company, the defendant company guaranteeing the principal and interest on \$400,000 par value of the bonds of said Pacific Traction Company.

\$88,000 par value of the defendant company's first mortgage bonds were exchanged, in addition to the cash payment of \$31,503.71 mentioned, for \$114,812.50 par value of the Tacoma Railway & Power Company's second mortgage bonds.

\$74,000 par value of the defendant company's first mortgage bonds were exchanged for \$74,000 par value of the Tacoma Railway & Power Company's first mortgage bonds.

\$190,000 of the Tacoma Railway & Power Company's first

mortgage bonds were also secured by the Puget Sound Electric Railway in consideration of the cash advanced above mentioned.

FINDING No. 2.

The Puget Sound Electric Railway owns the following lines of electric railway, viz.:

A line extending from the old city limits of Seattle at Spokane avenue to the old city limits of Tacoma at Bay street, consisting of 32.01 miles of main track and 10.91 miles of second track and 8.24 miles of sidings; a line extending from Renton Junction to Renton, consisting of 2.96 miles of main single track and 1.38 miles of sidings; a line extending from Willow Junction to Puyallup, consisting of 6.94 miles of single track and .6 miles of sidings; what is known as the East P street line in Tacoma, consisting of 1.11 miles of single main track and .11 miles of sidings; what is known as the Tideflats line in Tacoma, consisting of .58 miles of single main track and .13 miles of sidings, and the old Puyallup line, extending from Fern Hill, near the city of Tacoma, to Puyallup, consisting of 9.7 miles of main track and 9.86 miles of sidings and spurs. All of the above described lines, with the exception of the line described as the old Puyallup line and the East P street line, are operated by the defendant company, and said old Puyallup line and said East P street line are leased to and operated by the Tacoma Railway & Power Company.

FINDING No. 3.

That the accounting records of the defendant company show that the property last above described, with the exception of the old Puyallup line, including equipment, cost, down to the 30th day of June, 1909, the sum of \$3,710,805.15; that included in such amount are the following items, to-wit:

\$305,929.50 apportioned from the total discounts claimed to have been incurred by the company on all moneys borrowed, and which it is claimed is applicable to the cost of the lines operated by the defendant company.

\$9,536.58 cost of the P street line, which is not operated by the defendant company.

\$10,151.57 expended in the extension of the P street line, but which is not operated by the defendant company.

\$44,098.81 expended in repairing damage from floods occurring in the winters of 1902 and 1903, after the road was in operation, and which is properly chargeable to maintenance, and the sum of

\$407,234.00 advanced in cash as working capital, leaving the sum of \$2,933,863.69 cash expended by the defendant company in constructing its line.

That the line known as the old Puyallup line was purchased by the defendant company from the Tacoma Railway & Power Company for the sum of \$150,000.00, but said line is leased to and operated by the Tacoma Railway & Power Company.

FINDING No. 4.

That in addition to the lines of railroad above described as being owned by the defendant, such company owns the following properties, to-wit:

\$2,000,000 par value of the common stock of the Tacoma Railway & Power Company, being all of the stock of such company.

\$264,000 par value out of the total issue of \$1,500,000 par value of the bonds of the Tacoma Railway & Power Company.

\$2,382,687.27 promissory notes of the Tacoma Railway & Power Company.

\$250,000 par value of the preferred stock of the Pacific Traction Company, being the full amount of such stock issued.

\$1,250,000 par value of the common stock of the Pacific Traction Company, being the full amount of such stock issued.

Said company also owns the lighting system used for furnishing electric light to the towns and inhabitants of Kent, Auburn, Milton, and other towns along its line and the sawmill and timber lands at Milton, and \$447,638.64 in cash and current assets.

FINDING No. 5.

That in order to reproduce the lines owned and operated by the Puget Sound Electric Railway, not including the said East

P street line, and the old Puyallup line, it would be necessary to clear 133 acres, which clearing, for the purpose of ascertaining the cost of reproduction, is estimated to cost \$60.00 per acre.

It would be necessary to grub 580 stations, which grubbing, for the purpose of ascertaining the cost of reproduction, is estimated to cost \$15.00 per station.

It would be necessary to cut 200 trees growing off the right-of-way dangerous to operation, which tree-cutting, for the purpose of estimating the cost of reproduction, is estimated to cost \$2.00 per tree.

That it would be necessary to move 610,000 cubic yards of common excavation a distance of not to exceed 300 feet, which is estimated to cost 25 cents per yard; 150,000 cubic yards of hardpan or cemented gravel a distance of not to exceed 300 feet, which is estimated to cost 45 cents per cubic yard; 1,150 cubic yards of solid rock a distance of not to exceed 300 feet, which is estimated to cost \$1.10 per cubic yard, and of the above quantities it would be necessary to move an equivalent of 700,000 cubic yards a distance of 100 feet in excess of said 300-foot free haul allowance, which is estimated to cost 1 cent per cubic yard. Of the above excavation it would be necessary to transport 47,500 cubic yards for filling an average distance of 15 miles, which is estimated to cost $9\frac{1}{2}$ cents per cubic yard.

It would be necessary to dig ditches and drains at an estimated cost of \$2,000.00.

It would be necessary to ballast 46.35 miles of track with gravel, which is estimated to cost \$1,100.00 per mile.

It would be necessary to furnish and lay ties as follows: 157,877 ties 6"x8"x8', 16,446 ties 6"x8"x9', which are estimated to cost delivered in the material yard 35 cents per tie for the former and 40 cents per tie for the latter.

It would be necessary to lay 5,292.8 tons of 30-foot steel rails and 1,409.1 tons of 60-foot steel rails, which are estimated to cost delivered in the material yard \$39.50 per ton for the 30-foot rails and \$41.50 per ton for the 60-foot rails.

The laying of the rails would necessitate the furnishing and

use of 14,584 Weber joints complete, 1,327 American continuous joints complete, 106,596 pounds of angle bars, 25,240 pounds of fish plates, 10,304 pounds of track bolts $\frac{3}{4}$ "x $3\frac{3}{4}$ ", 2,574 pounds track bolts $\frac{5}{8}$ "x $2\frac{1}{2}$ ", 369,989 pounds of spikes 9-16"x $5\frac{1}{2}$ ", 2,000 rail braces, 3,010 lineal feet of guard rails, which track fastenings are estimated to cost \$53,592.

That it would be necessary to place 66 seventy-pound spring frogs, 22 seventy-pound rigid frogs, 22 sixty-pound rigid frogs, 16 fifty-pound rigid frogs, 13 forty-pound rigid frogs, 72 seventy-pound split switches complete, 12 sixty-pound split switches complete, 1 fifty-pound split switch complete, and 6 forty-pound split switches complete; 8 sets of head chairs, 8 sets of tie rods, 59 high stands, 2 low stands, 30 ground throws, 139 pairs of guard rails, 47 loose-tongue switches complete, 3 derails, 59 switch lamps, 61 switch locks, 5 sixty-pound crossing frogs complete, which for the purpose of estimating the cost of reproduction are estimated to cost \$16,201.00.

That it would be necessary to lay plank paving necessitating 1,136,630 feet B. M., and to use 590 yards of crushed rock in paving, which paving it is estimated would cost \$19,826.00.

That in order to reproduce the said line it would be necessary to lay 63.75 miles of track and to surface 56.70 miles of track, which track-laying and surfacing is estimated to cost \$44,625.00, and to place 139 frogs and switches, the placing of which is estimated to cost \$25.00 each, and to place 5 crossing frogs, the placing of which is estimated to cost \$25.00 each.

That in order to reproduce the line it would be necessary to drive one tunnel 180 feet long and to line such tunnel with timber, which for the purpose of estimating the cost of reproduction, is estimated to cost \$65.00 per lineal foot.

That in order to reproduce the said line it would be necessary to construct the following bridges, trestles and culverts:

One 210-foot bow spring steel truss, with cylinder piers, which is estimated to cost \$21,000.

One 72-foot deck girder, with pile abutments, which is estimated to cost \$3,600.00.

One 60-foot steel I-beam, which is estimated to cost \$1,800.00.

One combination bridge, two 110-foot spans with cylinder piers, which is estimated to cost \$12,100.00.

One 150-foot combination bridge, with pile abutments, which is estimated to cost \$6,750.00.

One 150-foot combination bridge, with cylinder piers, which is estimated to cost \$7,050.00.

One 200-foot Howe truss drawbridge, with pile crib, which is estimated to cost \$13,000.00.

One 190-foot Howe truss drawbridge, with pile crib, which is estimated to cost \$12,350.00.

One 100-foot pony Howe truss bridge, with pile abutments, which is estimated to cost \$3,000.00.

One 80-foot pony Howe truss bridge, with pile abutments, which is estimated to cost \$2,000.00.

One 87-foot pony Howe truss bridge, which is estimated to cost \$2,349.00.

One 60-foot pony Howe truss bridge, which is estimated to cost \$1,200.00.

361,612 lineal feet of piles in place, which are estimated to cost 25 cents per lineal foot.

39,256 lineal feet of piles cut off, which are estimated to cost 10 cents per lineal foot.

4,889,386 feet B. M. of timber in trestles, which are estimated to cost in place \$28.00 per thousand.

166,451 pounds of wrought iron in trestles, which is estimated to cost $3\frac{1}{2}$ cents per pound.

121,515 pounds of cast iron in trestles, which is estimated to cost $3\frac{1}{2}$ cents per pound.

150 lineal feet of 12-inch vitrified pipe, which is estimated to cost in place \$1.00 per lineal foot.

272 lineal feet of 14-inch vitrified pipe, which is estimated to cost \$1.25 per lineal foot in place.

659 lineal feet of 15-inch vitrified pipe, which is estimated to cost in place \$1.35 per lineal foot.

802 lineal feet of 16-inch vitrified pipe, which is estimated to cost in place \$1.50 per lineal foot.

1,364 lineal feet of 18-inch vitrified pipe, which is estimated to cost in place \$1.75 per lineal foot.

42 lineal feet of 24-inch vitrified pipe, which is estimated to cost in place \$2.90 per lineal foot.

That there is 8,382 feet B. M. of timber in wooden boxes, which is estimated to cost \$25.00 per thousand in place.

That there are 8,283 lineal feet of logs in culverts, which are estimated to cost 12 cents per lineal foot.

That it would be necessary to erect and construct pile and timber bulkhead to protect the bank of Black river, which is estimated to cost \$4,857.00.

That it would be necessary to construct a timber and rock-fill wing dam at the Puyallup river bridge, which is estimated to cost \$4,000.00.

That it would be necessary to place 2,000 cubic yards of riprap, which is estimated to cost \$1.25 per cubic yard.

That in order to reproduce the crossings, fences, cattle-guards and signs, it would be necessary to use 82,615 feet B. M. of timber in crossings, which is estimated to cost in place \$20.00 per thousand.

That it would be necessary to use 146,233 feet B. M. of timber in inclines to grade crossings, which is estimated to cost \$27.00 per thousand.

That it would be necessary to use 1,074 pounds of wrought iron in such inclines, which is estimated to cost $3\frac{1}{2}$ cents per pound, and 210 pounds of cast iron in the said inclines, which is estimated to cost $3\frac{1}{2}$ cents per pound.

That it would be necessary to use 30 kegs of wire spikes, which are estimated to cost \$3.00 per keg.

That it would be necessary to use 9,650 feet B. M. of timber in farm crossing inclines, which is estimated to cost \$25.00 per thousand.

3 kegs of wire spikes in such farm crossing inclines, which are estimated to cost \$3.00 per keg.

That it would be necessary to construct 54 miles of standard board fence, estimated to cost \$450.00 per mile.

8 miles of combination woven and barbed wire fence, estimated to cost \$300.00 per mile.

1,960 feet of tight board fence along the Bay street yard in Tacoma, which is estimated to cost 56 cents per lineal foot.

It would be necessary to construct 150 board gates, estimated to cost \$3.00 per gate.

82 "Trackmans" cattle-guards, which are estimated to cost \$25.00 each.

207 "Bartlett" cattle-guards, estimated to cost \$20.00 each.

It will be necessary to erect 13 danger signs and 196 warning signs, which are estimated to cost \$2.00 each.

28 railroad crossing signs, estimated to cost \$5.00 each.

3 station signs, estimated to cost \$10.00 each.

35 electric rail signs, estimated to cost \$3.00 each.

28 "Stop, Look, Listen" signs, estimated to cost \$1.00 each.

4 yard limit signs, estimated to cost \$4.00 each.

3 city limit signs, 31 whistle posts and 19 S. posts, which are estimated to cost \$1.00 each.

That in order to reproduce said line it would be necessary to install 38 platform stop signals, which are estimated to cost \$8.00 each.

3 train order signals, which are estimated to cost \$20.00 each.

2 block light sets, which are estimated to cost \$275.00 each.

That in order to reproduce the telegraph and telephone lines along its line it would be necessary to erect 53 forty-five foot cedar poles, which are estimated to cost \$4.50 each.

66 forty-foot cedar poles, which are estimated to cost \$3.80 each.

To place 1,675 four-pin cross-arms, with hardware, estimated to cost 80 cents each.

316 six-pin cross-arms, with hardware, estimated to cost \$1.00 each.

To string 15,312 pounds of No. 10 hard-drawn copper telephone wire, which is estimated to cost 18 cents a pound.

13,300 pounds of No. 9 bare iron telegraph wire, estimated to cost 6 cents per pound.

1,750 pounds of No. 10 weather-proof iron telegraph wire, which is estimated to cost 7 cents per pound.

It would be necessary to place 5,886 double petticoat insulators, with pins, which are estimated to cost 7 cents each.

To install 11 telegraph keys, which are estimated to cost \$1.05 each.

10 telegraph sounders, which are estimated to cost \$5.25 each.

14 relays, which are estimated to cost \$4.20 each.

6 box relays, which are estimated to cost \$4.25 each.

12 cutouts, estimated to cost \$1.25 each.

To install a telephone switchboard at Kent, which is estimated to cost \$300.00.

And that the labor necessary to erect, construct and install the said telegraph and telephone lines, including placing the cross-arms, would cost \$2,500.00.

That in order to reproduce said line it would be necessary to erect poles and fixtures as follows:

1,544 fifty-foot cedar transmission poles, which are estimated to cost \$5.50 each.

28 seventy-five foot cedar transmission poles, which are estimated to cost \$11.25 each.

603 thirty-foot trolley poles, estimated to cost \$2.55 each.

324 forty-foot trolley poles, which are estimated to cost \$3.80 each.

1,635 transmission cross-arms, 2-pin, with hardware, which are estimated to cost 70 cents each.

1,572 feeder cross-arms, 4-pin, with hardware, which are estimated to cost 80 cents each.

316 feeder cross-arms, 6-pin, with hardware, estimated to cost \$1.00 each.

57 galvanized guy wire clamps, 3 bolt, 7-16" strand, which are estimated to cost 12 cents each.

14 line anchor clamps, Mal. Galv., which are estimated to cost 50 cents each.

82 anchor rods, which are estimated to cost 50 cents each.

And the necessary labor to place such poles and fixtures, which is estimated would cost the sum of \$14,979.00.

That in order to erect and construct the transmission system it would be necessary to string 25,050 pounds of 1-0 bare copper transmission line wire, which is estimated to cost 18 cents per pound.

6,516 pounds of No. 1 bare copper transmission line wire, which is estimated to cost 18 cents per pound.

54,534 pounds of bare copper transmission No. 4 line wire, which is estimated to cost 18 cents a pound.

3,425 insulator pins, which are estimated to cost 40 cents each.

1,607 pole brackets, which are estimated to cost 40 cents each.

5,025 insulators, which are estimated to cost \$1.50 each.

And miscellaneous material connected with the installation, which is estimated to cost \$500.00.

And it is estimated that the labor necessary to install such transmission system would cost \$4,000.00.

That to reproduce the said line it would be necessary to construct a distributing system, consisting of the following items:

72 cut-out switches, 500 amperes Q. B., which are estimated to cost \$9.00 each.

66,598 pounds third rail crossing cables, W. P. 500 MCM, which is estimated to cost 18 cents per pound.

2,353 pounds of third rail crossing cable, 500 MCM, which is estimated to cost 18 cents per pound.

763 pounds third rail feed taps, W. P. 500 MCM, which are estimated to cost 18 cents per pound.

371 pounds of third rail feed taps, 300 MCM, which are estimated to cost 18 cents per pound.

300 pounds third rail feed taps, W. P. 100 MCM, which are estimated to cost 18 cents per pound.

74,470 pounds overhead feeders, bare, 500 MCM, which are estimated to cost 18 cents per pound.

137,529 pounds overhead feeders, bare, 300 MCM, which are estimated to cost 18 cents per pound.

9,119 pounds overhead feeders, W. P. 500 MCM, which are estimated to cost 18 cents per pound.

4,487 overhead grounds, W. P. 500 MCM, which are estimated to cost 18 cents per pound.

900 pounds overhead grounds, W. P. 300 MCM, which are estimated to cost 18 cents per pound.

613 pounds cross-bars, frogs and switch-jumpers, W. P. 500 MCM, which are estimated to cost 18 cents per pound.

1,142 pounds cross-bars, frogs and switch-jumpers, W. P. 300 MCM, which are estimated to cost 18 cents per pound.

335 pounds cross-bars, frogs and switch-jumpers, W. P. 4-O, which are estimated to cost 18 cents per pound.

16,900 running rail bonds, main line, which are estimated to cost 50 cents each.

1,200 running rail bonds, 212 B. B., which are estimated to cost 44 cents each.

304 running rail bonds, "A" 4-O, which are estimated to cost 37 cents each.

6,745 third rail bonds, which are estimated to cost \$1.28 each.

16,263 third rail insulators, which are estimated to cost 88 cents each.

2,935 tons third rail, 30 feet, 100-pound, which are estimated to cost \$39.50 per ton.

252 third rail noses, which are estimated to cost \$2.00 each.

504 nose fish-plates, which are estimated to cost 70 cents each.

12,800 third rail fish-plates, which are estimated to cost 24 cents each.

32,000 pounds third rail bolts, which are estimated to cost 3 cents per pound.

55,432 pounds trolley wire, 4-O, which is estimated to cost 18 cents per pound.

11,290 pounds trolley wire, 2-O, which is estimated to cost 18 cents per pound.

4,880 pounds trolley wire, 1-O, which is estimated to cost 18 cents per pound.

38,000 feet Siemens-Martens steel cable, 7-16", which is estimated to cost 3.15 cents per foot.

2,000 feet Siemens-Martens steel cable, 3/8", which is estimated to cost 2.7 cents per foot.

3,000 feet Siemens-Martens steel cable, 1/4", which is estimated to cost 2.5 cents per foot.

16,000 feet signal strand, 1/4", which is estimated to cost 83 cents per foot.

32,650 feet signal strand, 5-16", which is estimated to cost 1.1 cents per foot.

1,000 feet signal strand, 3/8", which is estimated to cost 1.3 cents per foot.

1,639 eyebolts, which are estimated to cost 12 cents each.

1,542 G. E. wood strain insulators, which are estimated to cost 23 cents each.

80 home-made wood strain insulators, which are estimated to cost 25 cents each.

240 single curve hangers, which are estimated to cost 51 cents each.

180 double curve hangers, which are estimated to cost 57 cents each.

588 straight line hangers, which are estimated to cost 51 cents each.

1,888 cable insulators, with pins, which are estimated to cost 23 cents each.

659 ears, 2-O, which are estimated to cost 30 cents each.

165 ears, single O, which are estimated to cost 25 cents each.

171 ears, 4-O, which are estimated to cost 35 cents each.

35 trolley frogs, which are estimated to cost \$3.50 each.

339 T-bar pole brackets, which are estimated to cost \$2.50 each.

16 Richmond flexible pole brackets, which are estimated to cost \$2.50 each.

53 steady bar bracket attachments complete, which are estimated to cost \$3.40 each.

3,997 messenger clips, $\frac{5}{8}$ " Mal. Galv., which are estimated to cost 6 cents each.

3,956 Detroit "Form 2" clamps, 4-O $\frac{5}{8}$ " Mal. Galv., which are estimated to cost 10 cents each.

46 Detroit "Form 5" clamps, 4-O $\frac{5}{8}$ " Mal. Galv., which are estimated to cost 20 cents each.

46 strain collars, $\frac{5}{8}$ ", which are estimated to cost 3.8 cents each.

645 steel hanger rods, Galv. $\frac{5}{8}$ "x $13\frac{1}{2}$ ", which are estimated to cost 3 cents each.

18 steel hanger rods, Galv. $\frac{5}{8}$ "x $13\frac{1}{2}$ ", Fig. A (120-foot span), which are estimated to cost 7.5 cents each.

645 hangers, Galv. $\frac{5}{8}$ "x4" Fig. A (120-foot span), which are estimated to cost 3.2 cents each.

616 hangers, Galv. $\frac{5}{8}$ "x $5\frac{1}{2}$ " Fig. A (120-foot span), which are estimated to cost 3.8 cents each.

645 hangers, Galv. $\frac{5}{8}$ "x $7\frac{1}{2}$ " Fig. A (120-foot span), which are estimated to cost 4.5 cents each.

645 hangers, Galv. $\frac{5}{8}$ "x $9\frac{3}{4}$ " Fig. A (120-foot span), which are estimated to cost 5.3 cents each.

645 hangers, Galv. $\frac{5}{8}$ "x $12\frac{3}{4}$ " Fig. A (120-foot span), which are estimated to cost 6.6 cents each.

29 hangers, Galv. $\frac{5}{8}$ "x $5\frac{1}{2}$ " Fig. B (120-foot span), which are estimated to cost 4.7 cents each.

31 hangers, Galv. $\frac{5}{8}$ "x $7\frac{1}{2}$ " Fig. B (100-foot span), which are estimated to cost 5.3 cents each.

16 hangers, Galv. $\frac{5}{8}$ "x $8\frac{3}{4}$ " Fig. B (100-foot span), which are estimated to cost 5.9 cents each.

16 hangers, Galv. $\frac{5}{8}$ "x $10\frac{1}{2}$ " Fig. B (100-foot span), which are estimated to cost 6.5 cents each.

16 hangers, Galv. $\frac{5}{8}$ "x $13\frac{1}{2}$ " Fig. B (100-foot span), which are estimated to cost 7.5 cents each.

18 hangers, Galv. $\frac{5}{8}$ "x $11\frac{3}{4}$ " Fig. B (60-foot span), which are estimated to cost 7 cents each.

18 hangers, Galv. $\frac{5}{8}$ "x $12\frac{3}{4}$ " Fig. B (60-foot span), which are estimated to cost 7.3 cents each.

92 wood brake strain insulators, $1\frac{1}{2}$ " Dia. 14" Ins., which are estimated to cost 18 cents each.

18 Crosby clips, $\frac{3}{8}$ ", which are estimated to cost 8 cents each.

57 Crosby clips, 7-16", which are estimated to cost 9 cents each.

15 trolley wire connections, brass 2"x $\frac{7}{8}$ " 4-O Grvd., which are estimated to cost \$1.10 each.

339 messenger insulators, porcelain 10,000 V. $1\frac{3}{4}$ " pin hole, which are estimated to cost 15 cents each.

4 overhead switches, which are estimated to cost \$12.50 each.

100,165 feet B. M. of timber in cable boxes, which is estimated to cost \$10.00 per thousand.

Miscellaneous material, which is estimated to cost \$500.00.

And for the labor necessary for the installation of the distribution system, it is estimated \$25,000.00.

That in order to reproduce the sub-station buildings it would be necessary to erect a brick sub-station at Kent, containing 122,708 cubic feet, which is estimated to cost $12\frac{1}{2}$ cents per cubic foot.

A frame battery room, with special floor containing 28,940 cubic feet, which is estimated to cost 10 cents per cubic foot.

A brick sub-station at Milton, containing 87,030 cubic feet, which is estimated to cost $12\frac{1}{2}$ cents per cubic foot.

A frame battery room at Milton, with special floor containing 28,940 cubic feet, which is estimated to cost 10 cents per cubic foot.

And a brick sub-station at Puyallup, containing 84,820 cubic feet, which is estimated to cost $12\frac{1}{2}$ cents per cubic foot.

That in order to reproduce the line, it would be necessary to erect shops and car houses as follows:

Corrugated iron car shed, containing 8,568 square feet floor area, which is estimated to cost 45 cents per square foot.

Frame car sheds, containing 19,248 square feet floor area, which is estimated to cost 50 cents per square foot.

And it would be necessary to install two sets of track scales, which are estimated to cost \$1,300.00 per set.

That to reproduce the stations, waiting-rooms and miscellaneous buildings, it would be necessary to construct:

A brick and frame passenger station at Tacoma, which is estimated to cost \$4,000.00.

A two-story frame station building at Kent, containing 28,050 square feet floor area, which is estimated to cost \$2.00 per square foot.

Frame station buildings, bungalow type, containing 5,728 square feet floor area, which is estimated to cost \$1.25 per square foot.

Old standard frame station buildings, containing 8,318 square feet floor area, which is estimated to cost \$1.00 per square foot.

108 square feet floor area of open sheds, which is estimated to cost 50 cents per square foot.

2,396 square feet floor area of frame freight sheds, which are estimated to cost 90 cents per square foot.

5,374 square feet floor area of freight sheds, corrugated iron, which is estimated to cost \$1.20 per square foot.

1,060 square feet floor area of miscellaneous frame sheds, which are estimated to cost 50 cents per square foot.

478 square feet floor area of miscellaneous corrugated iron sheds, which are estimated to cost 50 cents per square foot.

216 square feet floor area of telephone shacks, which are estimated to cost 50 cents per square foot.

306 square feet floor area of tool sheds, which are estimated to cost 50 cents per square foot.

372 square feet floor area of section-houses, which are estimated to cost 50 cents per square foot.

64,111 square feet of low passenger platform, which is estimated to cost 10 cents per square foot.

5,875 square feet of high passenger platform, which is estimated to cost 15 cents per square foot.

4,562 square feet of freight platforms, which is estimated to cost 15 cents per square foot.

3,909 square feet of milk platforms, which are estimated to cost 20 cents per square foot.

8 water closets, which are estimated to cost \$50.00 each.

That in order to reproduce the line it would be necessary to install certain sub-station equipment as follows:

3 three-pole, 50,000-volt lightning arresters, with insulators, which are estimated to cost \$621.00 each.

5 type H, 50,000-volt oil switches, which are estimated to cost \$1,600.00 each.

212 Thomas insulators, 50,000-volt, which are estimated to cost \$1.85 each.

36 disconnecting switches, 50,000-volt, which are estimated to cost \$41.50 each.

494 pounds 1-O bare copper wire, which is estimated to cost 18 cents per pound.

7 oil-cooled transformers, 200 KW, which are estimated to cost \$2,300.00 each.

4 oil-cooled transformers, 180 KW, which are estimated to cost \$1,000.00 each.

4 current transformers, 50,000-volt, which are estimated to cost \$150.00 each.

3 induction motor generator sets, 300 KW, with non-automatic double pole oil switches, 2,300 volts and 600-volt, generator panels (1 slate, 2 marble), which are estimated to cost \$8,500.00 each.

2 automatic oil switches, 4-pole St. 300-ampere, with slate slabs, and 2 current transformers, which are estimated to cost \$140 each.

3 H. E. Ind. voltmeters, with potential transformers, which are estimated to cost \$85.00 each.

6 railway feeder panels, marble, which are estimated to cost \$200.00 each.

1 lighting panel, 16-inch marble, which is estimated to cost \$100.00.

1 lighting panel, 24-inch marble, which is estimated to cost \$300.00.

2 C. R. regulators, which are estimated to cost \$315.00 each.

2 booster transformers, 3 KW, which are estimated to cost \$47.50 each.

2 booster transformers, 5 KW, which are estimated to cost \$66.50 each.

1 Polyphase recording wattmeter, 300 amperes, and 2 200-watt potential transformers and 2 current transformers, 300-5 amperes, which are estimated to cost \$200.00.

1 T. R. wattmeter, 800 amperes, 600-volt, which is estimated to cost \$175.00.

1 induction motor panel, 2,300 volts, which is estimated to cost \$290.00.

40 feet lead covered insulated cable, 500 MCM, which is estimated to cost 91 cents per foot.

400 feet lead covered insulated cable No. 2, which is estimated to cost 90 cents per foot.

80 feet lead covered insulated cable No. 4, which is estimated to cost 30 cents per foot.

147 feet weather-proof cable, 800 MCM, which is estimated to cost 60 cents per foot.

509 feet weather-insulated cable, 500 MCM, which is estimated to cost 45 cents per foot.

26 feet rubber covered cable, 500 MCM, which is estimated to cost 65 cents per foot.

540 feet rubber covered cable No. 2, which is estimated to cost 8 cents per foot.

2 50,000-volt, 150 to 50 current transformers, which are estimated to cost \$300.00 each.

1 motor panel, 24-inch marble, 2,300-volt, with automatic oil switch, 300 ampere, 4-pole St., which is estimated to cost \$290.00.

1 T. R. wattmeter, polyphase 300-ampere, with 2-300 to 5 current transformers, which are estimated to cost \$200.00.

1 T. R. wattmeter, 800 amperes, 600-volt, which is estimated to cost \$175.00.

5 oil switches, 3-pole, 30,000 volts, which are estimated to cost \$400.00 each.

9 disconnecting switches, 30,000 volts, which are estimated to cost \$20.00 each.

30 Westinghouse air brake jacks and slabs, which are estimated to cost \$8.00 each.

30 marble barriers for same, which are estimated to cost \$30.00 each.

3 lightning arresters, 3-pole, 30,000-volt, which are estimated to cost \$100.00 each.

3 generator panels, slate, 16-inch, which are estimated to cost \$200.00 each.

3 slate slabs and switch handles, which are estimated to cost \$20.00 each.

6 feeder panels, 16-inch slate, which are estimated to cost \$50.00 each.

1 slate slab, with synchronizer, which is estimated to cost \$55.00.

2 front connected feeder switches, 600 amperes, which are estimated to cost \$20.00 each.

10 current transformers, 30,000-volt, which are estimated to cost \$125.00 each.

8 potential transformers, which are estimated to cost \$150.00 each.

1 compensator for 180 KW transformer, 17½ KW, which is estimated to cost \$275.00.

318 pounds 1-O bare copper wire, which is estimated to cost 18 cents per pound.

Miscellaneous equipment transformer and generator rooms, which are estimated to cost \$500.00.

3 air compressors and receiving tanks, with 4-horse-power motors, which are estimated to cost \$300.00 each.

Labor of installing transformers and generators in three substations is estimated to cost \$3,400.00.

3 storage battery sets, consisting of 288 cells chloride accumulators, 15 plates per cell; 288 cells chloride accumulators, 17 plates per cell; 288 cells chloride accumulators, 17 negative plates per cell; 428 feet lead covered rubber insulated cable, 1,000 MCM, 3 booster sets, 35 KW, 6 marble battery panels, including all additional apparatus necessary to 3 complete storage battery equipments, with exception of positive plates miss-

ing from one battery, including freight and installation, which are estimated to cost \$106,149.00.

That in order to reproduce the shop equipment, it would be necessary to install:

1 sharper, 20-inch, which is estimated to cost \$250.00.

1 radial drill, 24-inch, which is estimated to cost \$150.00.

1 metal lathe, 20-inch by 12-inch, which is estimated to cost \$570.00.

And miscellaneous hand tools, which are estimated to cost \$30.00.

That in order to reproduce the water stations, it will be necessary to install 2 box tanks, 6'x7'x16', which are estimated to cost \$100.00 each.

Pumping plant and miscellaneous pipe, which is estimated to cost \$200.00.

To reproduce the roadway tools and surveying instruments, it is estimated that same will cost \$1,500.00.

That to reproduce the cars and equipment in use by said company, it would be necessary to procure:

9 combination baggage and coaches, which are estimated to cost \$55,860.00.

5 passenger coaches, which are estimated to cost \$20,530.00.

4 motor trailers, which are estimated to cost \$21,000.00.

11 trailers, which are estimated to cost \$55,280.00.

4 observation cars, which are estimated to cost \$41,160.00.

4 racetrack cars, which are estimated to cost \$10,500.00.

22 box cars, which are estimated to cost \$16,050.00.

25 hopper cars, which are estimated to cost \$16,875.00.

14 gondolas, which are estimated to cost \$9,350.00.

97 flat cars, which are estimated to cost \$54,126.00.

2 freight motors, box type, which are estimated to cost \$6,000.00.

3 freight motors, cab type, which are estimated to cost \$7,500.00.

1 steam shovel, which is estimated to cost \$10,000.00.

1 derrick car, which is estimated to cost \$1,200.00.

1 piledriver, which is estimated to cost \$1,500.00.

That the defendant company purchased 3 locomotives, which had been in use at the time of the purchase; that while said locomotives would cost new the sum of \$24,000.00, it would cost to replace the locomotives second-hand, as the same were purchased, the sum of \$7,500.00.

That to reproduce said line, it would be necessary to procure electric equipment of cars as follows:

8 General Electric No. 66 4-motor equipments complete, which are estimated to cost the sum of \$60,600.00.

4 General Electric No. 66 2-motor equipments complete, which are estimated to cost the sum of \$16,000.00.

2 General Electric No. 205 4-motor equipments complete, which are estimated to cost the sum of \$14,000.00.

4 General Electric No. 90 4-motor equipments complete, which are estimated to cost \$12,800.00.

4 Westinghouse Electric No. 49 equipments complete, which are estimated to cost \$4,800.00.

5 General Electric No. 66 freight motor equipments complete, which are estimated to cost \$37,500.00.

That the said company purchased second-hand a Packard Standard touring car; that had the same been purchased new it would have cost the sum of \$4,750.00, but that the said company paid and it is estimated that to reproduce the same in the form in which it was purchased would cost \$2,000.00.

FINDING No. 6.

That after a road is originally constructed, and after the same is turned over to the operating department, improvements are constantly made in the roadbed by section men and by the operating department, the expenditure for which is necessarily charged to operation; that for a number of years the roadbed undergoes what is known as seasoning, and as said roadbed is so seasoned and improved by proper maintenance it is appreciated in value approximately 10 per cent. of its value at the time of its being turned over to the operating department as aforesaid;

That the ballast on a roadbed is affected by elements and

traffic, and depreciates, so that the present value of the ballast is approximately 85 per cent. of its value new;

That the ties have depreciated so that their present value is but 30 per cent. of their value new;

That the rails, fastenings and joints have depreciated so that their present value is 85 per cent. of their value new;

That the frogs and switches depreciate so that their present value is 80 per cent. of their value new;

That the paving has depreciated so that the present value is 50 per cent. of its value new;

That the money expended in track-laying and surfacing depreciates in proportion to the track materials, and that, taking into consideration the depreciation of the moneys expended in track-laying and surfacing, the present value is 70 per cent. of its value new;

That the lining of the tunnel on said line has depreciated, no other portion of the tunnel having depreciated, and that the present value of the tunnel is 95 per cent. of its value new;

That on said line is a large amount of track, to-wit, approximately seven miles, built on pile trestles, and in addition thereto are numerous bridges and culverts; that the bridges, trestles and culverts on said line have depreciated so that their present value is but 52 per cent. of their value new;

That the crossings, fences, cattle-guards and signs have depreciated until the present value is 54 per cent. of their value new;

That the interlocking and signal apparatus have depreciated until their present value is 65 per cent. of their value new;

That the telegraph and telephone system and lines have depreciated until their present value is 70 per cent. of their value new;

That the poles and fixtures have depreciated until their present value is 57 per cent. of their value new;

That the transmission system, being made up largely of copper wire and insulators, does not depreciate materially and its present value is approximately 100 per cent. of its value new;

That the present value of the distribution system is approximately 93 per cent. of its value new;

That the present value of the sub-station buildings is approximately 90 per cent. of their value new;

That the present value of the shops and car houses is approximately 80 per cent. of their value new;

That the present value of the stations, waiting-rooms and miscellaneous buildings is approximately 81 per cent. of their value new;

That the sub-station equipment has depreciated until its present value is approximately 73 per cent. of its value new;

That the present value of the shop equipment is 50 per cent. of its value new;

That the present value of the water stations is approximately 40 per cent. of their value new;

That the present value of the roadway tools is approximately 50 per cent. of their value new;

That the present value of the car bodies and trucks is approximately 65 per cent. of their value new;

That the present depreciated value of the locomotives below their second-hand value when purchased is 96 per cent. of such purchase price;

That the present value of the electrical equipment of cars is approximately 65 per cent. of its value new;

That the present value of the miscellaneous equipment, consisting of the Packard standard touring car, the same being purchased second-hand, is approximately 84 per cent of its purchase price.

FINDING No. 7.

That, in the conduct of a railroad business, it is necessary to have constantly on hand supplies and material and also necessary to have on hand cash in order to properly and economically carry on the conduct of such road; that the report of the defendant company to the Railroad Commission for the fiscal year ending June 30, 1908, shows cash on hand amounting to \$90,277.32, and material and supplies on hand of \$207,463.-

25, making a total of cash and supplies of \$297,740.57; that for the fiscal year ending June 30, 1909, the report of said road to the Commission shows cash on hand \$103,367.04, and material and supplies on hand \$171,256.81, making a total of cash and supplies in the sum of \$274,623.85; that \$300,000 is a reasonable sum to allow as working capital to cover cash working capital and to furnish necessary material and supplies.

FINDING No. 8.

That it would cost to reproduce new the property owned and used by said railroad for railroad purposes, and consisting of the line of road between Seattle and Tacoma, the Renton branch, the Tideflat branch, and the Orting branch, including all equipment, transmission system, distribution system, buildings, right-of-way, land and terminal grounds, and miscellaneous stores and cash on hand, the sum of \$4,157,558.

FINDING No. 9.

That the present depreciated value of said property, based solely on the cost of reproducing the same new, is the sum of \$3,598,232.00; that the cost of reproducing the several elements and the depreciated value referred to in the foregoing findings is as follows:

COST OF REPRODUCTION AND DEPRECIATION VALUE,
PUGET SOUND ELECTRIC RAILWAY.

(June 30, 1909.)

No.	ACCOUNT.	Cost of repro- duction.	Pct. to- tal depre- ciation.	Cost of repro- duction less depreciation.
<i>Construction.</i>				
1.	Right-of-way and real estate.....	\$917,773	000	\$917,773
2.	Engineering and superintendence.....	53,336	000	53,336
3.	Fiscal and physical supervision and man- agement	186,955	000	186,955
4.	Grading	251,857	000	275,135*
5.	Ballast	50,985	15	43,337
6.	Ties	61,865	70	18,559
7.	Rails, fastenings and joints.....	321,136	15	272,966
8.	Frogs and switches.....	16,201	20	12,961
9.	Paving	19,826	50	9,913
10.	Track-laying and surfacing.....	48,225	30	33,758
11.	Tunnels	11,700	5	11,115
12.	Bridges, trestles and culverts.....	344,553	48	179,168
13.	Crossings, fences, cattle-guards and signs	41,508	46	22,414
14.	Interlocking and signal apparatus.....	914	35	594
15.	Telegraph and telephone lines.....	9,196	30	6,437
16.	Poles and fixtures.....	29,328	43	16,717
17.	Transmission system	29,548	000	29,548
18.	Distribution system	253,065	7	235,350
19.	Sub-station buildings	42,607	10	38,346
20.	Shop and car houses.....	16,080	20	12,864
21.	Stations, waiting-rooms and miscellane- ous buildings	44,211	19	35,811
22.	Sub-station equipment	182,159	27	132,976
23.	Shop equipment	1,000	50	500
24.	Water stations	400	60	160
25.	Engineering instruments and roadway tools	1,500	50	750
26.	Legal and general expense.....	17,779	000	17,779
27.	Interest during construction.....	145,181	000	145,181
28.	Contingencies	96,266	000	96,266
29.	Stores and working capital.....	300,000	000	300,000
	Totals.....	\$3,495,154		\$3,106,669
<i>Equipment.</i>				
30.	Cars	\$326,931	35	\$212,505
31.	Locomotives	7,500	4	7,200
32.	Electric equipment of cars.....	145,700	35	94,705
33.	Miscellaneous equipment	2,000	16	1,680
	Totals.....	\$482,131		\$316,090
<i>Total Equipment.</i>				
	Total construction and equipment.....	\$3,977,285		\$3,422,759
34.	Lighting system	30,000	16	25,200
	Total construction, equipment, and light- ing system	\$4,007,285		\$3,447,959
35.	Brokerage fees	150,273	00	150,273
	Grand total.....	\$4,157,558		\$3,598,232

* Covers appreciation of roadbed.

FINDING No. 10.

That the unit prices hereinbefore set out as the cost of reproduction of the units of material ordinarily handled by contract include the contractors' profit or are the unit prices for which contracts could be let covering the handling and furnishing of such units.

FINDING No. 11.

That it would cost in cash at the present time to reproduce the right-of-way, lands and terminal grounds of such railroad owned and used by it for railroad purposes, and such as it now owns which in the immediate future will be necessary for it to use for railroad purposes, the sum of \$917,773.00.

FINDING No. 12.

That in the construction of an electric line of road it is necessary to have a careful supervision by competent electrical engineers as distinguished from the services of construction engineers over all parts of construction until its completion; that Stone & Webster engineering corporation in the construction of the line exercised supervision and acted as purchasing agents for electrical and other supplies, and, in order to reproduce the property economically, it would be necessary to employ engineers of like experience and standing to supervise such work, and 7.5 per cent. of the amount expended on items numbered 2, 4 to 26 inclusive and 30 to 34 inclusive, mentioned in finding No. 9, would be a reasonable compensation to cover such services.

FINDING No. 13.

That a reasonable and fair allowance for engineering and superintendence by constructing engineers is 3 per cent. of the cost of reproducing the grading, tunnels, bridges, trestles and culverts, ties, rails, track fastenings, frogs and switches, track-laying and surfacing, fences, crossings, cattle-guards and signs, interlocking and signal apparatus, telegraph and telephone lines, poles and fixtures, transmission system, distribution system, substation buildings, shops, car-houses, stations, waiting-

rooms, miscellaneous buildings, substation equipment, shop equipment, water stations, roadway tools and section equipment.

FINDING No. 14.

That a reasonable and fair allowance for legal and general expenses would be 1 per cent. of the items mentioned in connection with the engineering expenses, together with 1 per cent. on the amount paid for taxes during construction.

FINDING No. 15.

That a reasonable and fair allowance for interest during construction would be $3\frac{3}{4}$ per cent. of the items last mentioned plus the amount necessary for legal and general expenses, engineering and superintendence and $7\frac{1}{2}$ per cent. on the cost of reproduction of the right-of-way.

FINDING No. 16.

That at least 25 per cent. of the cost of a railroad should be procured from a source other than mortgage bonds. That if such sum is so procured, bonds can be floated on properties as attractive as the defendant's line for the remaining 75 per cent. at par, less the cost and expense attendant upon a full investigation of the properties, a report thereon by a reliable financial firm and a brokerage commission in interesting capital therein. That 5 per cent. of the amount of such bonds is a reasonable and ample sum to cover such expenses.

FINDING No. 17.

That in estimating the cost of a piece of work to be thereafter performed it is customary and proper for engineers to add to the total estimate made up of the units of labor and material a sum approximating 10 per cent. to cover exigencies and contingencies. That after a work has been constructed many of the exigencies and contingencies have been met and will be covered by the changed and increased units actually encountered, and in estimating the cost of reproduction such increase and changed units will be provided for. Labor conditions, how-

ever, must be provided for, and other exigencies will arise, and to cover such conditions the Commission estimates that 5 per cent. of the cost of reproducing the property, excluding equipment, real estate, interest on real estate during construction, working capital and brokerage, should be added to cover such contingencies.

FINDING No. 18.

That, while the property of a railroad is constantly growing older and different units are depreciating, and renewals and replacements will require a greater expenditure with different years, still, if the property be properly maintained and proper provision be made for renewals and replacements, the actual market value of such road should not and will not fluctuate by reason of the depreciation of the different units being greater or less in different years.

FINDING No. 19.

That the city of Seattle has a present population exceeding 275,000 people; the city of Tacoma a population exceeding 100,00 people; Puyallup, 7,000; Kent, 3,500; Auburn, 1,500; Renton, 1,300; Georgetown, 7,000; Meadows, 500; Quarry, Duwamish and Allentown, between 500 and 600; Riverton, between 400 and 450; Foster, 900; Tukwila, between 500 and 600; Earlington, 500; Algona, 630; Pacific City, 800; Milton, 600; and along the said line there are numerous small villages, and, excluding Renton and Puyallup, which are situate upon the branch lines, the territory between Seattle and Tacoma contains a population tributary to this road of approximately 15,000 people;

That in the year 1900, when the construction of said line was contemplated and decided upon, the official census taken by the United States government showed the following population tributary to the line, to-wit: Georgetown, 243; Kent, 755; Auburn, 489; Puyallup, 884; Renton, 412; Seattle, 80,671; Tacoma, 37,714; the remaining towns and villages at that time having no existence sufficient to justify their being mentioned in the census report;

That the valley so traversed is highly rich in its agricultural possibilities, and particularly in its adaptability to the raising of small fruits, from two to three acres being sufficient to support a family; that the growth of the cities of Seattle and Tacoma, with the rapid development of the towns and valleys traversed, is such as adds great value to the line of the defendant company; that the road largely traverses the center of the different valleys, and it is unlikely that another electric line will in the near future attempt to parallel this line; that the fact that the defendant company owns the capital stock of the Tacoma Railway & Power Company's line, thus giving it an entry into the business center of the city of Tacoma, adds great value to the line, independent of the fact of its paying reasonable trackage tolls therefor; and its alliance with the Seattle Electric lines, by which it is able to secure reasonable traffic arrangements with said lines, enabling it to enter the business portion of the city of Seattle, adds value to its line.

FINDING No. 20.

That the gross earnings of the road since it began operating have been as follows, for the year ending June 30:

1903.....	\$354,990 67
1904.....	430,732 84
1905.....	450,632 32
1906.....	574,962 06
1907.....	708,548 78
1908.....	721,542 85

—and for the year 1909, calculated on the same basis with reference to terminal trackage rights, the gross earnings were \$755,552.17.

FINDING No. 21.

That the cost in cash of the Puget Sound Electric Railway down to the 31st day of March, 1903, the date the property was formally taken over by the defendant company, was approximately the sum of \$1,961,914.02; that the earnings from operation for the twelve months ending December 31st, 1903, was the sum of \$101,119.30, being 5.15 per cent. on the cost; that the betterments and additions expended during the year

1903 cost the sum of \$377,191.18, and the net earnings from operation for the calendar year ending December 31, 1904, amounted to the sum of \$122,719.09, being 5.25 per cent. on the total amount expended; that the betterments and additions expended during the calendar year ending December 31, 1904, amounted to \$151,018.17, and the net earnings from operation for the year 1905 were \$128,955.77, being 5.18 per cent. on the total amount invested; that the betterments and additions expended during the year 1905 was the sum of \$167,976.75, and the net earnings from operation for the year 1906 were \$207,021.21, being 7.79 per cent. on the total invested; that the betterments and additions expended during the year 1906 was the sum of \$216,552.32, and the net earnings from operation for the year 1907 was the sum of \$285,052.79, being 9.92 per cent. on the total amount invested; that the amount expended for betterments and additions for the year 1907 was the sum of \$382,379.85, and the net earnings from operation for the year 1908 was the sum of \$247,562.82, being 7.60 per cent. on the total investment; that the amount expended for betterments and additions for the year 1908 was the sum of \$464,174.11, and the net earnings from operation for the year 1909 was the sum of \$213,490.16, being 5.74 per cent. on the total amount invested.

FINDING No. 22.

That included in the operating expenses for the years mentioned in finding No. 13 is current maintenance and replacement of way, structures and equipment, cost of conducting transportation, general and miscellaneous expenses, and taxes; but the same does not include any allowance for depreciation other than that expended, and that a fair allowance for depreciation in addition to the amounts so expended for replacement and charged to operating expenses during said years would be a sum approximating \$500,000; that, assuming the volume of business to be transacted in the future would be approximately equal to that transacted for the years 1908 and 1909, there should be set aside to cover current maintenance and replacement of way, structures and equipment, damages from floods,

fire and other causes, and exigencies, a sum approximating \$162,136.94 from operating revenue, which sum should be charged to operating expenses; that for the calendar year 1908 there was charged to operating expenses, to cover such items, as shown by the testimony of G. E. Tripp, the sum of \$91,125.15; and for the calendar year 1909 there was charged to operating expenses to cover such items \$102,125.21, leaving an apparent deficit of \$60,011.73.

FINDING No. 23.

That the liabilities of the Puget Sound Electric Railway consist of the following, with a par and market value thereon as follows:

<i>Item.</i>	<i>Par Value.</i>	<i>Market Value.</i>
Common stock	\$3,500,000	\$875,000
Preferred stock	500,000	425,000
Bonds	4,133,000	3,926,350
Convertible notes	1,500,000	1,500,000
Notes payable	615,000	615,000
Note for old Puyallup line.....	150,000	150,000
Totals.....	\$10,398,000	\$7,491,350

That the property owned by said company and not used by it in connection with the railroad lines operated by it consists of the following, with a par and market value thereon as follows, to-wit:

<i>Item.</i>	<i>Par Value.</i>	<i>Market Value.</i>
Tacoma Railway & Power Company bonds.....	\$264,000 00	\$211,200 00
Tacoma Railway & Power Company stocks.....	2,000,000 00	500,000 00
Tacoma Railway & Power Company notes.....	2,382,687 27	2,382,687 27
Pacific Traction stock, common and preferred...	1,500,000 00	149,086 50
Timber lands	106,514 90	100,000 00
P Street line.....	11,000 00	11,000 00
Old Puyallup line.....	150,000 00	150,000 00

—making a total market value of \$3,503,973.77, leaving a market value for the lines operated by the defendant company, as reflected by the amount and market value of its stocks, bonds and other liabilities constituting its capitalization, of \$3,987,376.23.

FINDING No. 24.

That on the said main line, extending from Seattle to Tacoma and consisting of 43.12 miles of main and second track,

there are sixty-five curves with an aggregate length of curved line amounting to 7.30 miles; that there are 35.82 miles of straight track; that there are 16.70 miles of level track; that there are 28 ascending grades, making an aggregate ascent of 356.39 feet; said ascending grades have an aggregate length of 13.85 miles; that there are 28 descending grades, making an aggregate descent of 409.46 feet and an aggregate length of descending grades of 12.57 miles;

That on the Renton branch, consisting of 2.96 miles of single main track, there are fifteen curves with an aggregate length of curved line amounting to 0.97 miles; that there is 1.99 miles of straight track; that there is 1.85 miles of level track; that there are two ascending grades, making an aggregate ascent of 26.3 feet, said ascending grades having an aggregate length of 0.51 miles; that there is a descending grade making an aggregate descent of 32.0 feet and an aggregate length of descending grades of 0.60 miles;

That on the Tideflats line, consisting of 0.58 miles of single main track, there are 5 curves, with an aggregate length of curved line amounting to 0.30 miles; that there are 0.28 miles of straight track; that there are 3.49 miles of level track; that there are two ascending grades, making an aggregate ascent of 16 feet, said ascending grades having an aggregate length of 0.15 miles; that there is a descending grade making an aggregate descent of 28.50 feet and an aggregate length of descending grades of 0.12 miles

That on the Orting branch, consisting of 6.94 miles of single main track, there are 19 curves, with an aggregate length of curved line amounting to 0.80 miles; that there are 6.14 miles of straight track; that there are 3.94 miles of level track; that there are 7 ascending grades, making an aggregate ascent of 74.27 feet, said ascending grades having an aggregate length of 2.93 miles; that there are 2 descending grades, making an aggregate descent of 46.90 feet and an aggregate length of descending grades of 0.52 miles.

FINDING No. 25.

That the operating revenue received by the defendant company is derived approximately 80 per cent. from its passenger business and 20 per cent. from its freight business.

FINDING No. 26.

That as shown by the annual report of said defendant company for the year 1909, the gross operating revenue derived from passenger service was \$516,767.90, the gross revenue derived from freight business was \$131,779.85, and earnings by said road from sources other than freight and passenger amounted to the sum of \$19,101.91;

That the gross operating expenses as shown by said report properly applicable to the passenger business was the sum of \$316,230.58, and the operating expenses properly applicable and chargeable to freight business was the sum of \$77,765.30;

That, as before stated, no allowance was made in such operating expenses for depreciation excepting such as was actually expended for renewals.

FINDING No. 27.

That from a consideration of the foregoing findings the Commission concludes that the fair cash market value of the lines of railroad hereinbefore described as being owned and operated by the defendant company on the 31st day of June, 1909, was the sum of \$4,070,237.00.

FINDING No. 28.

That in order to reproduce the line owned by the said defendant known at the East P street line, which line is under lease to the Tacoma Railway & Power Company, it would be necessary to move 2,000 cubic yards of common excavation a distance of approximately 7 miles, which is estimated to cost 35 cents per cubic yard;

It would be necessary to place 3,436 6"x8"x8' ties, which are estimated to cost 35 cents each;

It would be necessary to lay 111.3 tons of 30-foot steel rails,

which are estimated to cost \$39.50 per ton delivered in the material yard;

That the laying of the rails would necessitate the furnishing and use of track fastenings as follows: 14,004 pounds of angle bars, 790 pounds of fish plates, 1,434 pounds of track bolts and 7,265 pounds of spikes, said track fastenings being estimated to cost \$641.00;

It would be necessary to place one complete turnout, which is estimated to cost \$130.00;

That it would be necessary to lay and surface 1.21 miles of track, which is estimated to cost \$700.00 per mile, and to place one turnout, the labor necessary for the placing of which costing \$25.00;

It would be necessary to erect 75 thirty-foot trolley poles, costing \$2.55 each; to place 25 four-pin feeder cross arms, with hardware, estimated to cost 80 cents each, the labor engaged in erecting said poles and fixtures being estimated to cost \$337.50;

That the distribution system in use upon said East P. street line consists of 3,345 pounds of 300 MCM weather-proof feeder, estimated to cost 18 cents per pound;

1,830 pounds of single O hard-drawn trolley wire, estimated to cost 18 cents per pound;

25 pins and insulators, estimated to cost $6\frac{1}{4}$ cents each;

76 No. 1 ears, estimated to cost 27 cents each;

61 straight-line hangers, estimated to cost 51 cents each;

15 single-curve hangers, estimated to cost 57 cents each;

123 strain insulators, estimated to cost 23 cents each;

123 eye bolts, estimated to cost 12 cents each;

4,000 lineal feet of $\frac{1}{4}$ -inch signal strand, estimated to cost 83 cents per hundred feet;

216 4-0 track bonds No. A, estimated to cost 37 cents each;

46 4-0 track bonds No. BB, estimated to cost 40 cents each;

246 pounds switch jumpers, estimated to cost 18 cents per pound;

The labor engaged in installing such distribution system, estimated to cost \$277.00;

That the legal and general expense involved in the construction of said East P street line is estimated to cost \$100.00;

That the interest during construction is estimated to amount to \$103.00;

That an allowance for engineering should be made amounting to the sum of \$200.00;

And that there should be added to the above items approximately \$520.00 to cover contingencies;

That the expenses connected with the financing said line would be 5 per cent. of 75 per cent. of the cost of reproducing the same figured as above, amounting to the sum of \$403.00;

That the said East P street line, as operated, is all located in the streets in the city of Tacoma; that the defendant company owns right-of-way for an extension of said line, which is hereinbefore referred to;

That it would cost to reproduce the said East P street line new the sum of \$11,342.00.

FINDING No. 29.

That the depreciated value of said East P street line, based solely upon the cost of reproducing the same new, is the sum of \$8,821.00.

The cost of reproducing the same new and the depreciated value are as shown in the following table, to-wit:

COST OF REPRODUCTION AND DEPRECIATED VALUE OF THE EAST "P" STREET LINE.

(June 30, 1909.)

No.	ACCOUNT.	Cost of repro- duction.	Pct. to- tal depre- ciation.	Cost of repro- duction less depreciation.
1.	Engineering and superintendence.....	\$200	00	\$200
2.	Grading	700	00	770**
3.	Ties	1,233	75	308
4.	Rails, fastenings and joints.....	5,037	20	4,030
5.	Frogs and switches.....	130	20	104
6.	Track-laying and surfacing.....	879	30	615
7.	Poles and fixtures.....	548	40	329
8.	Distribution system	1,488	10	1,339
9.	Legal and general expense.....	100	00	100
10.	Interest during construction.....	103	00	103
11.	Contingencies	520	00	520
12.	Brokers' fees	403	00	403
	Totals.....	\$11,342		\$8,821

**Covers appreciation of roadbed.

FINDING No. 30.

That in order to reproduce the line owned by the said defendant company known as the old Puyallup line, extending from Fern Hill to Puyallup, which line is owned by the defendant company, but is under lease to the Tacoma Railway & Power Company, it would be necessary to clear 32 acres, estimated to cost \$60.00 per acre;

To grub 5,000 square rods, estimated to cost \$1.00 per square rod;

To move 60,000 cubic yards of common excavation a distance of not to exceed 300 feet, which is estimated to cost 25 cents per cubic yard, and of the above mentioned quantities it would be necessary to move an equivalent of 60,000 yards 100 feet in excess of the free haul limit of 300 feet, said overhaul being estimated to cost one cent per cubic yard;

It would be necessary to place 8,000 cubic yards of ballast, estimated to cost 60 cents per cubic yard;

To place 25,934 6"x8"x8' ties, estimated to cost 35 cents each;

It would be necessary to lay 1,190.43 tons of rails, estimated to cost \$39.50 per ton, said rails requiring track fastenings as follows: 900 pounds of angle bars, estimated to cost 3 cents per pound; 137,280 pounds of fish plates, estimated to cost $2\frac{1}{2}$ cents per pound; 14,280 pounds of track bolts, estimated to cost $3\frac{1}{4}$ cents per pound; 83,800 pounds of spikes, estimated to cost $2\frac{1}{4}$ cents per pound, said track fastenings costing \$5,808.60;

That it would be necessary to install 25 rigid frogs, estimated to cost \$25.00 each;

18 split switches, estimated to cost \$20.00 each;

7 sets of head chairs, estimated to cost \$2.00 each;

7 sets of tie bars, estimated to cost \$6.00 each;

13 low stands, estimated to cost \$18.00 each;

12 ground throws, estimated to cost \$10.00 each;

1 railroad crossing, estimated to cost \$200.00;

That it would be necessary to pave with plank a portion of the track inside of the city limits of Puyallup, said paving re-

quiring 26,000 feet B. M. of lumber, estimated to cost \$10.00 per thousand; 2,400 feet B. M. of wood filler, estimated to cost \$18.00 per thousand; 5 kegs of wire spikes, estimated to cost \$3 per keg, and it is estimated that the labor engaged in laying same would cost \$142.00;

It would be necessary to lay and surface 9.70 miles of main track, estimated to cost \$700.00 per mile, and to lay 5 miles of spurs, estimated to cost \$200.00 per mile, and to place 26 frogs and switches, the placing of which is estimated to cost \$25.00 each;

That to reproduce the bridges, trestles and culverts on said line would require 294,361 feet B. M. of timber in frame trestles, estimated to cost \$28.00 per thousand; 8,640 pounds of wrought iron, estimated to cost $3\frac{1}{2}$ cents per pound; 6,268 pounds of cast iron, estimated to cost $3\frac{1}{2}$ cents per pound; 27,220 feet B. M. of timber in wooden culverts, estimated to cost \$26.00 per thousand; 470 pounds of wrought iron in timber culverts, estimated to cost $3\frac{1}{2}$ cents per pound; 280 pounds of cast iron in timber culverts, estimated to cost $3\frac{1}{2}$ cents per pound; 304 lineal feet of logs in culverts, estimated to cost 12 cents per lineal foot; 24 lineal feet of 24-inch vitrified pipe, estimated to cost in place \$2.90 per lineal foot and 500 lineal feet of logs in cribs, estimated to cost 10 cents per lineal foot;

That to reproduce the crossings, fences, cattle-guards and signs along said line would require 21,800 feet B. M. plank in highway crossings, estimated to cost \$20.00 per thousand; 3 "Stop, Look, Listen" signs, estimated to cost \$5.00 each; 2 railway crossing signs, estimated to cost \$1.00 each; 1 city limit sign, estimated to cost \$2.00;

That to reproduce the interlocking and signal apparatus along said line it would be necessary to install 7 block light sets, estimated to cost \$275.00 each, and to string 17 miles of wire, estimated to cost \$37.60 per mile, and the labor engaged in stringing said wire is estimated to cost \$291.20;

That to reproduce the poles and fixtures along said line it would be necessary to erect 932 thirty-foot trolley poles, estimated to cost \$2.55 each; 480 four-pin cross arms, with hard-

ware, estimated to cost 80 cents each; 1,075 pins and insulators, estimated to cost 7 cents each; and the labor engaged in erecting poles and fixtures is estimated to cost \$4,194.00;

That to reproduce the distribution system along said line it would be necessary to string 68,960 pounds of 4-0 bare copper feeder, estimated to cost 18 cents per pound; 5,495 pounds of 300 MCM weather-proof copper feeder, estimated to cost 18 cents per pound; 29,045 pounds of single 0 hard-drawn trolley wire, estimated to cost 18 cents per pound; 20,000 lineal feet $\frac{1}{4}$ -inch signal strand, estimated to cost 83 cents per hundred feet; 466 straight-line hangers, estimated to cost 51 cents each; 60 single-curve hangers, estimated to cost 57 cents each; 526 single 0 ears, estimated to cost 27 cents each; 500 strain insulators and eye bolts, estimated to cost 35 cents each; 3,418 running rail bonds, estimated to cost 30 cents each, and miscellaneous material estimated to cost \$250.00; and the labor engaged in installing the distribution system is estimated to cost \$4,684.50;

That in order to reproduce the stations, waiting-rooms and miscellaneous buildings along said line would require 29,474 feet B. M. rough lumber, estimated to cost \$11.00 per thousand; 8,400 feet B. M. of dressed lumber, estimated to cost \$20.00 per thousand; 30,000 shingles, estimated to cost \$2.25 per thousand; 290 pounds of nails, estimated to cost 3 cents per pound; 80 gallons of paint, estimated to cost \$1.50 per gallon; and the labor engaged in erecting said stations, waiting-rooms and miscellaneous buildings is estimated to cost \$650.00;

That it is estimated that the engineering and superintendence necessary to reconstruct said line would cost \$4,392.00;

That the legal and general expenses incident to the construction of said line would cost \$1,464.00;

That during the construction of said line it would be necessary to expend \$3,525.00 for interest, which sum includes interest upon right-of-way;

That there should be added to the above items approximately \$7,763.00 to cover contingencies;

That in order to reproduce the right-of-way and real estate

along said line it would be necessary to expend the sum of \$12,000.00;

That the expenses connected with the financing said line would be 5 per cent. of 75 per cent. of the cost of reproducing the same above figured, amounting to the sum of \$6,583.00;

That it would cost to reproduce the said line new the sum of \$182,127.00.

FINDING No. 31.

That the depreciated value of the said old Puyallup line, based solely upon the cost of reproducing the same new, is the sum of \$129,002.00;

The cost of reproducing the same new and the depreciated value are shown in the following table, to-wit:

COST OF REPRODUCTION AND DEPRECIATED VALUE OF THE OLD PUYALLUP LINE.

(June 30, 1909.)

No.	ACCOUNT.	Cost of reproduction.	Pct. to- tal depre- ciation.	Cost of repro- duction less depreciation.
1.	Right-of-way and real estate.....	\$12,000	00	\$12,000
2.	Engineering and superintendence.....	4,392	00	4,392
3.	Grading	22,520	00	24,080*
4.	Ballast	4,800	25	3,600
5.	Ties	9,077	75	2,244
6.	Rails, fastenings and joints.....	52,831	40	31,699
7.	Frogs and switches.....	1,595	40	957
8.	Paving	460	20	368
9.	Track-laying and surfacing.....	8,447	45	4,646
10.	Bridges, trestles and culverts.....	9,631	60	3,860
11.	Crossings, fences, cattle-guards and signs.	455	70	137
12.	Interlocking and signal apparatus.....	2,855	10	2,570
13.	Poles and fixtures.....	7,027	90	703
14.	Distribution system	25,345	30	17,742
15.	Stations, waiting-rooms and miscellaneous buildings	1,338	50	669
16.	Legal and general expense.....	1,464	00	1,464
17.	Interest during construction.....	3,525	00	3,525
18.	Contingencies	7,763	00	7,763
19.	Brokers' fees	6,583	00	6,583
	Totals.....	\$182,127		\$129,002

*Covers appreciation of roadbed.

WITNESS, the Railroad Commission of Washington, this 26th day of February, 1910.

THE RAILROAD COMMISSION OF WASHINGTON,

By H. A. FAIRCHILD, *Chairman*.

J. C. LAWRENCE, *Commissioner*.

JESSE S. JONES, *Commissioner*."

Attest:

F. M. LARNED, *Secretary*.

FINDING No. 2.

That practically since the beginning of operations on said road up to and including the 16th day of October, 1909, the defendant company charged for a return trip from Seattle to the points named in the first table following the amounts mentioned in the first column thereof; that on the 17th day of October the return trip rate was canceled, such return trip thereafter being twice the amount set out in the second column of said table; that the amount charged for the return trip from Tacoma to the points named in the table second following are those set out in the first column of said second table; that on the 17th day of October, 1909, said return trip rates were canceled, said return trip thereafter being twice the amount set out in the second column of said second table; that since the said 17th day of October, 1909, the said rates have been and are now in force, the only exception to the return rates being twice the single fare is in the fare charged between Seattle and Tacoma and Tacoma and Seattle, the single fare in such case being 73 cents and the return fare being \$1.25. Said tables are as follows, to-wit:

Spokane Avenue	\$0 10	\$0 5
Argo	15	6
Englewood	15	7
Georgetown	15	8
Colvins .....	....	8
McLeans	15	9
Gorgiats	15	9
Marinos .....	....	9
Maples	15	10
Burts	15	10
Mackays	15	10
Van Asselts	15	10
Chicago Avenue	15	11
Davis	15	12
Meadows	15	13
Southside	15	13
Floraville	15	14
Cardmoores	15	14
Duwamish	15	15
Quarry	15	16
Allentown .....	....	17

Riverton	15	17
Mortimer	15	18
Foster	15	19
Tukwila	15	20
Black River	25	21
Renton Junction	25	22
Earlington	25	25
Renton	25	27
Nelsons	35	23
Orillia	35	25
O'Brien's	45	30
Kent	50	34
Thomas	60	38
Meredith	70	39
Christopher	70	40
Auburn	75	44
Farrow	85	47
Algona (Stuck)	85	48
Pacific City	85	50
Bluffs	85	51
Jovita	85	54
Edgewood	95	55
Milton	1 00	60
Fife	1 00	62
Cushman	1 00	63
Willow Junction	1 00	64
McAleer	1 00	65
Ardena	1 00	67
Firwood	1 00	69
Cedarhurst	1 00	71
Berryton	1 00	73
Puyallup	1 00	74
Meeker	1 00	77
Brookville	1 00	65
Tidehaven	1 00	66
Waverly	1 00	67
Tacoma	1 00	73

TABLE NO. 2.

Waverly	\$0 15	\$0 6
Tidehaven	15	7
Brookville	15	8
Meeker	15	22
Puyallup	15	20
Berryton	15	18
Cedarhurst	15	17
Firwood	15	15
Ardena	15	15
McAleer	15	10

Willow Junction	9
Cushman	10
Fife	15 11
Milton	15 13
Edgewood	25 18
Jovita	19
Bluffs	35 22
Pacific City	23
Algona (Stuck)	45 25
Farrow	45 26
Auburn	45 29
Christopher	50 33
Meredith	50 34
Thomas	60 35
Kent	60 39
O'Brien	70 44
Orillia	75 48
Nelsons	85 50
Renton	95 56
Earlington	54
Renton Junction	85 51
Black River	85 52
Tukwila	95 53
Foster	95 54
Mortimer	95 55
Riverton	95 56
Allentown	56
Quarry	95 57
Duwamish	95 58
Cardmoores	1 00 59
Floraville	1 00 59
Southside	1 00 60
Meadows	1 00 60
Davis	1 00 61
Chicago Avenue	1 00 62
Van Asselts	1 00 63
Mackays	1 00 63
Burts	1 00 63
Maples	1 00 63
Marinos	64
Gorgiats	1 00 64
McLeans	1 00 64
Colvins	65
Georgetown	1 00 65
Englewood	1 00 66
Argo	1 00 67
Spokane Avenue	1 00 69
Seattle	1 00 73

FINDING No. 3.

That the following points are suburban to Seattle, viz., Georgetown, Colvins, McLeans, Gorgiats, Marinos, Maples, Burts, Mackays, VanAsselts, Chicago Avenue, Davis, Meadows, Sunnyside, Floraville, Cardmoores, Duwamish, Quarry, Allentown, Riverton, Mortimer, Foster, Tukwila, Black River and Renton Junction. That practically 90 per cent. of the heads of families living in said suburban towns gain their livelihood in Seattle as clerks, laborers and mechanics; that the clerks travel to and from such points to Seattle practically six days in the week, laborers traveling on the average of four round trips per week; that such heads of families either own their homes in such suburban towns or are paying for the same on the installment plan. That they were induced to purchase such homes by reason of the rate charged for the round trip and its long continued enforcement. That under the rates charged prior to October 17th, 1909, the return trip as far south as Tukwila being not in excess of 15 cents, or but 7 cents in excess of the street-car fare in Seattle, residents, laborers, clerks and others employed in Seattle were able by reason of obtaining cheaper homes at such points then adjacent to street-car lines in Seattle, to pay such additional 7-cent car fare. That under the increased rate to such suburban towns the residents, laborers and clerks are unable from their salaries to pay such increased rate, by reason of its being cheaper to rent homes adjacent to such street-car lines than occupy their homes and pay such increased rates, and many families and residents of such places, to-wit, 20 from Quarry, Duwamish and Allentown, 12 from Tukwila, 18 from Foster and more or less from all towns mentioned as suburban, have already abandoned their homes and moved to points adjacent to street-car lines in Seattle, and many others are contemplating moving if relief be not granted in this hearing, all by reason of such increased rates and fares.

That the following points are suburban to Tacoma: Waverly, Tidehaven, Brookville, Meeker, Puyallup, Berrytown, Cedarhurst, Firwood, Ardena, McAleer, Willow Junction, Cushman,

Fife, Milton, Edgewood, Jovita, Bluffs, Pacific City and Algona, and a large part of the heads of families residents of such towns earn their livelihood working as clerks, laborers and mechanics in Tacoma, and a similar condition exists as to such towns suburban to Tacoma as that hereinbefore set out as to the points suburban to Seattle, and many are leaving their homes and moving to Tacoma for the same reasons as above set out.

FINDING No. 4.

That the town of Renton is served by the Seattle, Renton & Southern Railway, an electric line extending from Seattle to Renton. That the rates now and heretofore in force by said last named company is the rate charged by the defendant prior to the 17th day of October, 1909, namely, 15 cents for the single trip and 25 cents for the round trip. That for the year ending June 30th, 1909, the average earnings from passengers going between Seattle and Renton, as indicated by the sales of tickets at the different ticket offices, amounted to the sum of \$17,254.10, or an average of \$1,438.00 per month; that between June 30th, 1909, and the 16th day of October, 1909, said sales had increased to an average of \$2,708.00 per month, and between the 17th day of October, 1909, and the 1st day of January, 1910, while the said increased rates were in force, said passenger earnings decreased to \$302.00 per month, as shown by the sales at the said ticket offices. That the return fare being twice the single fare, during said last mentioned time a greater number of people traveling over said line would be likely to pay cash fare to the conductor on the train; such cash fares not having been segregated and accounts taken thereof other than cash fares collected by the conductors, the Commission is unable to state the percentage collected by the conductors as cash fare, but that between the 16th day of October, 1909, and the 1st day of January, 1910, the earnings of the Seattle, Renton & Southern Railway from passenger business between Renton and Seattle increased more than 150 per cent.

That Earlington is situate between Renton Junction and Renton, and there is in the vicinity of Earlington tributary to

the defendant company's lines approximately 500 people; that a large number, to-wit, 90 per cent., of the heads of families residents of and in the vicinity of Earlington earn their livelihood in Seattle as laborers and clerks, and that a similar condition exists as to the residents of Earlington as has been heretofore pointed out as to other suburban points. That in addition to the facts hereinbefore set out, the residents of Earlington and vicinity, in order to reach their place of business in Seattle, walk from the vicinity of the station an additional mile and a half in order to obtain the cheap fares charged by the Seattle, Renton & Southern.

FINDING No. 5.

That the town of Puyallup was and is served by the defendant line and by the Tacoma Railway & Power Company, an allied corporation, such last named line running from Fern Hill over an adverse grade, traveling a distance of approximately 16 miles to Tacoma, the defendant company's line via Willow Junction being 9.94 miles to Tacoma and being over a much easier grade and through a more fertile and populous district than the Tacoma Railway & Power Company's line. That in the year 1908, when the defendant company was seeking a franchise from the city of Puyallup to lay its lines in the streets of Puyallup, the town, through members of its council, contemplated and suggested inserting a provision in the franchise limiting the rates thereafter to be charged between Puyallup and Tacoma to a rate not exceeding the rates then and theretofore charged over the line of the Tacoma Railway & Power Company, namely, 15 cents for a single trip and 25 cents for the round trip; that at such time the manager of the defendant company objected to the insertion of the provision, giving as a reason therefor that it would be an obstacle to the floating of the securities, and at such time indirectly promised that should such franchise be granted the rates in the future would not exceed the rates charged by the Tacoma Railway & Power Company as before stated, and by reason thereof and relying thereon, the provision was waived by the town council of Puyallup and such provision was not inserted in the franchise. That Puyallup is

suburban to Tacoma, many persons living in Puyallup dependent for their livelihood on employment in Tacoma as laborers, clerks and mechanics, and similar conditions exist as to such residents as have heretofore been set out as existing in other suburban towns.

FINDING No. 6.

That the Seattle-Alaska-Yukon-Pacific Exposition opened in the month of June, 1909, and continued during the months of June, July, August and September, and the increased number of passengers carried during such four months would not be a fair indication of the normal volume of business transacted by such company, but the increase of business of said road for the months of January, February, March, April and May, 1909, over the corresponding months for 1908 was practically as follows:

NUMBER OF PASSENGERS CARRIED.

<i>Month.</i>	<i>1908.</i>	<i>1909.</i>
January	168,290	204,180
February	162,150	210,048
March	177,815	245,814
April	182,841	250,249
May	213,380	276,130

—whereas after said increased rates were in force, the comparison of passengers carried for the corresponding months are as follows:

NUMBER OF PASSENGERS CARRIED.

<i>Month.</i>	<i>1908.</i>	<i>1909.</i>	<i>1910.</i>
November	198,450	168,643	.....
December	204,641	177,989	.....
January	168,290	204,180	166,918

That while the sales of tickets at the ticket offices may not fully and fairly represent the falling off of travel after such increased rates were in force, as allowance should be made for the increased sales on the train, the following tends to indicate the business done before and after such increased rates at the different ticket offices, to-wit:

The ticket sales at the Seattle office for travel between Seattle and Foster averaged between June 30th, 1909, and October 16th, 1909, \$543.34 per month, while between October 17th and

the 1st of January such sales decreased to an average of \$66.73 per month;

That the same office showed sales between Seattle and River-ton for the former period averaging \$629.45 per month, while for the latter period such sales decreased to an average of \$80.-35 per month;

That the sales between Seattle and Duwamish for the former period averaged \$191.25, while for the latter period they averaged \$38.18 per month;

That the sales for the former period between Seattle and Pacific City averaged \$335.34, while for the latter period they decreased to \$130.30 per month;

That for the former period the sales between Seattle and Tukwila averaged \$345.91 per month, while for the latter period they decreased to \$38.96 per month;

That the sales for the former period between Seattle and Kent averaged \$3,664.35 per month, while for the latter period they decreased to \$1,460.00 per month;

That the ticket sales at the Tacoma office showed sales to Edgewood during the former period of \$70.00 per month, decreasing during the latter period to \$33.00 per month;

That the sales for the former period between Tacoma and Jovita averaged \$30.00 per month, decreasing during the latter period to \$21.00 per month;

That the ticket sales between Tacoma and Auburn for the former period averaged \$553.80 per month, decreasing during the latter period to \$316.00 per month;

That the ticket sales between Tacoma and Kent for the former period averaged \$449.10 per month, decreasing during the latter period to \$239.25 per month.

FINDING No. 7.

That as shown by the accounting records of said company, the cash expended in constructing and equipping the road at the close of the different years since construction was the amount set forth in the first column of the following table, the net returns derived from operation being set out in the second column,

and the percentage of return to the amount invested being set out in the third column, to-wit:

<i>Date to which investment extends.</i>	<i>Amount expended.</i>	<i>Net earnings for 12 months ending Dec. 31.</i>	<i>Percent of return.</i>
March 31, 1903.....	\$1,961,914 02	\$101,119 30	5.15
December 31, 1903.....	2,339,105 20	122,719 09	5.25
December 31, 1904.....	2,490,123 37	128,955 77	5.18
December 31, 1905.....	2,668,100 12	207,021 21	7.79
December 31, 1906.....	2,874,652 44	285,052 79	9.92
December 31, 1907.....	3,257,032 29	247,562 82	7.60
December 31, 1908.....	3,721,206 40	213,490 16	5.74

FINDING No. 8.

That the operating expenses, deducted from the gross earnings so as to leave the net returns mentioned in the preceding finding, include the amount actually incurred in maintenance of way and structures, including such replacements and renewals as were actually made, but the same did not provide for a replacement or renewal fund, and approximately \$51,000.00 has been expended for and charged to replacements and renewals. That considering the nature of the business, the volume of business and the rates charged in the past therefor, approximately 25 per cent. of the gross revenues received in the past should have been expended or set aside for maintenance of way, structures and equipment and to care for floods and exigencies calling for renewals and replacements, and such proportion thereof as was not expended in maintenance and renewals should have been set apart in a fund to care for such replacements and renewals, and, assuming that the volume of business for the year 1910 will be similar and equal to that for 1908 and 1909, there should be set aside from operating expenses a sum approximating \$162,136.94 per annum to care for such maintenance and depreciation. That the amount actually expended and charged for replacement for the year 1908 was the sum of \$91,511.15, and the amount actually expended and charged to such maintenance for the year 1909 was the sum of \$102,125.21.

FINDING No. 9.

That the passengers carried into Seattle and those carried into Tacoma by the defendant company's lines are discharged from the defendant company's cars in the business centers of

the respective cities; that a train leaves each of said cities practically each hour from 6 a. m. until 12 o'clock midnight; that the service rendered is regular and reasonably efficient; that the general manager and district manager of the defendant company's line each testified that, based on their experience under the increased rates since October 17th, 1909, the number of passengers carried between the terminals would not be materially decreased by reason of the increase in the rates between such terminals, and, based upon such testimony and the tables and figures filed, the Commission finds that at least an equal number of passengers will be carried between such terminals for the year 1910 as was carried under the old rates for the year 1909.

FINDING No. 10.

That under the rates in force prior to October 17th, 1909, the revenue derived from through business between Seattle and Tacoma was approximately 56.8 per cent. of the gross passenger receipts.

FINDING No. 11.

The commission finds that the accounting officers of the defendant company's line and of the Seattle Electric Company's lines and the Tacoma Railway & Power Company's lines have misconstrued in their settlements the terminal contracts existing between the defendant company and the said terminal companies. That in the past in the settlements no allowance has been made or credit given the defendant company for passengers carried by the defendant over its line where the passenger has paid the terminal company the 5 cents cash fare for riding on the street-car system of such terminal company and thereafter presented his transfer and received a credit in purchasing his ticket from the defendant company. That for the year 1909 the defendant company was entitled to have received from the Seattle Electric Company the sum of \$4,480.90, which it did not receive and was not credited with from such source, and should have received from the Tacoma Railway & Power Company the sum of \$1,309.24, which it did not receive and was not credited with from such Tacoma Railway & Power Company, and had

such payments been made and received the net earnings would have been increased in the sum of \$5,790.14.

FINDING No. 12.

That on the first day of July, 1909, a new contract was entered into with the Seattle Electric Company concerning the amounts to be paid by the Seattle Electric Company for passengers carried in the cars of the defendant over the lines of the Seattle Electric Company within the city of Seattle and destined to points on the defendant company's lines outside of the city and beyond the lines of the Seattle Electric Company by which the defendant company was to receive from the Seattle Electric Company $3\frac{1}{4}$ cents per passenger, whereas under the contract in force prior thereto the defendant received but 2 cents per passenger for a similar service. That during the fiscal year ending June 30th, 1909, the Seattle Electric Company carried in the cars of the defendant, for which it collected the fares, passengers coming from and destined to points on the line of the defendant company outside of the city of Seattle and beyond its lines, 2,118,768 passengers, and had such contract been in force for such fiscal year, the defendant would have received from such source, in addition to what it did receive, the sum of \$26,484.54.

FINDING No. 13.

That for the year 1908 the taxes assessed against the defendant's entire real and personal property by the cities, counties and State of Washington amounted to \$16,244.57, and for the year 1909 the total amount so assessed against such property was the sum of \$68,000.00. The assessment is in litigation, the defendant claiming that the assessment is excessive. The defendant in its annual report to the Commission places its total taxes for the year 1909 at \$46,073.58. The Commission estimated the taxes for the ensuing year at \$50,000.00, 53 per cent. of which is properly chargeable to the operating property of the defendant and 47 per cent. of which should be borne by the non-operating property.

FINDING No. 14.

That the net earnings of the company for the year 1910, based on the rates now in force, modified by the conclusions reached herein and under the terminal contracts now in force, are estimated by the Commission to amount to the sum of \$289,179.32, made up as follows:

Gross earnings for 1909, settlements being made between terminal companies and defendant as per contract in force prior to July 1st, 1909, under the construction adopted by the accounting officers.....	\$756,671 71
224,045 passengers carried in Seattle on transfers honored (omitted from consideration in settlement), on which defendant should have 2 cents additional.....	4,480 90
65,462 passengers carried in Tacoma on transfers honored (omitted from consideration in settlement), on which defendant should have received 2 cents net.....	1,309 24
2,118,763 passengers carried in Seattle, and under new contract defendant receives $1\frac{1}{4}$ cents additional per passenger	26,484 54
Additional revenue from through passengers (Seattle-Tacoma) under increased rates approximating 23.37 per cent.	66,610 59
Additional revenue from local and single trip passengers, estimated	3,000 00
Gross earnings, total.....	\$858,556 98

OPERATING EXPENSES.

Operating expenses for the year 1909 (annual report, omitting credit of \$1,119.54).....	\$395,115 42
Increase in operating expenses, if report had been made under old contract charging 3 cents per passenger carried within Seattle and Tacoma, to the cost of operation (on transfers honored)	87,750 51
Additional amount to cover estimated maintenance and depreciation	60,011 73
Estimated taxes for the year on operating property (53 per cent. of \$50,000).....	26,500 00
Total operating expenses.....	\$569,377 66
Estimated net earnings.....	289,179 32
Grand total.....	\$858,556 98

Witness the Railroad Commission of Washington this 26th day of February, 1910.

THE RAILROAD COMMISSION OF WASHINGTON,

By H. A. FAIRCHILD, *Chairman*.

J. C. LAWRENCE, *Commissioner*.

JESSE S. JONES, *Commissioner*.

Attest:

F. M. LARNED, *Secretary*.

